



FEMIN-ICT

# POLICY ROADMAP

Comprehensive findings, discoveries and initiatives undertaken within the framework of the Femin-ICT initiative.



Co-funded by  
the European Union





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# Executive Summary

This document describes the comprehensive findings, discoveries, and initiatives undertaken within the framework of the Femin-ICT initiative. This collaborative effort, funded by the Erasmus+ Program of the European Union and executed by seven partners from six EU countries, focuses on the identification of barriers, obstacles, legal gaps, and challenges impeding women's effective and successful pursuit of careers in Information and Communication Technology (ICT).

The primary objective of this policy roadmap is to outline actionable steps for each participating country to address gender disparities within the ICT industry, and to establish urgent, important and needed actions to advance into a better representation of Women in ICT towards Europe's Digital Decade digital targets for 2030.

## **Key Activities and Discoveries**

### *State of the situation of Women in STEM and ICT per country*

Analysis of the state of women in STEM and/or ICT per country, based on in-depth studies conducted locally in the six countries, resources from the European Institute for Gender Equality (EIGE), and the European Commission. interviews were conducted with Policy Makers and individuals representing both the ICT sector and women in technology.

### *Barriers and Obstacles Analysis*

Thorough examination of barriers and obstacles hindering women's progress in ICT careers.  
Identification of gaps in local laws and regulations contributing to gender disparities.

### *Country-Specific Recommendations*

Tailored actionable steps for each member country, addressing specific challenges identified during the initiative. Emphasis on fostering an environment conducive to the successful pursuit of ICT careers by women.

### *Strategic Roadmap*

The strategic roadmap emerges as a pivotal outcome of the initiative, synthesising insights from the project's final conference discussions. It serves as a guide for reshaping policies and actions, offering a roadmap for supporting women in the ICT industry. This roadmap strategically aligns with the broader goals of the Erasmus+ Program and Europe's Digital Decade digital targets for 2030. By addressing key challenges and leveraging opportunities identified in the discussions, the strategic roadmap ensures a cohesive and synchronised approach to advancing gender inclusivity in the ICT sector. This alignment enhances the overall impact of the initiative, contributing directly to the overarching objectives of fostering innovation, inclusivity, and digital transformation outlined in the Erasmus+ Program and Europe's Digital Decade. As a result, the initiative not only addresses immediate needs within the ICT industry but also contributes to the larger strategic vision for a more inclusive and digitally advanced Europe.

# Introduction and objectives of the document

## About Femin-ICT

The gender gap in ICT courses, jobs and functions is a well-documented global phenomenon. FEMIN-ICT was a program that started in February 2021 and ended in February 2023, funded by the Erasmus+ Program of the European Union. It aimed to fight stereotypes and other barriers within institutions that can enable or hinder the participation of women and femininities in the ICT sector, equipping the ICT sector with the necessary skills, tools and knowledge to empower women in ICT and better integrate both sexes in all functions and levels of responsibility, as well as assisting all structural, law-making, academic and grass-roots efforts towards closing the gender gap within the ICT sector.

The underlying idea of the project was that by training and supporting the wider ICT ecosystem to embrace gender equality measures and offer spaces, products and services that respond to womens' and femininities' needs, then the ICT sector will be able to attract, absorb, retain and empower more of them and thus become more diversified, equitable and inclusive.

To that end, FEMIN-ICT offered a unique training and support programme, equipping, on the one hand, ICT Businesses, ICT business ecosystem and public authorities with those skills and tools, to empower women in the ICT sector and integrate the gender dimension in all their practices and, on the other hand, women who are either employed in the ICT sector, or already running ICT businesses, or even unemployed but interested in pursuing an ICT career to initiate or advance their careers in the digital economy.

Through the project's outcomes, our goals were to achieve the following objectives:

- **Support for ICT Businesses:** Both existing and potential employers in the ICT sector received support and training to cultivate a more inclusive working environment. Business support ecosystems underwent training to enhance their ability to offer

gender-responsive services, adopt effective gender communication and outreach strategies, and provide more effective support to women ICT entrepreneurs. This, in turn, aimed to address and rebalance the existing gender gap.

- **Empowerment Initiatives in Academic Institutions:** Academic institutions, municipalities, and prefectures underwent training to better design and implement women-friendly empowerment initiatives and structures. These initiatives encompassed upskilling programs, networking activities, co-working spaces and hubs, and community-led ICT projects.
- **Empowering Women in ICT Careers:** The overall goal was to empower women to pursue careers in ICT. The support provided aimed to enable women to not only enter the field but also to continue their work, fostering productive and rewarding careers comparable to those experienced by their male counterparts.

By achieving these objectives, the project sought to contribute to a more inclusive and gender-balanced landscape in the ICT sector.

## Objectives of the document

The primary objective of this policy roadmap is to uncover and address gender disparities within the ICT industry, offering a comprehensive guide tailored to the specific needs of each participating country. This document is not only intended for policy makers but is designed to serve as a valuable resource for the countries in this Consortium. It translates the collaborative efforts of the project into actionable suggestions that are deeply rooted in the unique contexts of each partner country.

By delving into the distinct policies and practices of each country, the roadmap aims to shed light on how gender-related issues manifest, examining the implementation or gaps within existing legislation. This country-specific analysis provides the foundation for effective policy recommendations, offering a detailed understanding of the challenges and opportunities uncovered through our joint endeavours.

The roadmap, therefore, goes beyond a generic set of recommendations; it synthesises the insights and discoveries from the six partner countries into concrete, country-specific steps for addressing gender disparities. Through this approach, it seeks to establish urgent, important, and needed actions that will propel progress towards a more equitable representation of women in the ICT sector. By aligning with Europe's Digital Decade targets for 2030, this initiative aspires to contribute significantly to the overarching goals, ensuring that the proposed strategies are not only actionable but also tailored to the unique policy landscapes of each country.

The Annex Femin-ICT methodology and the Toolkit to design parent-friendly workplaces in the ICT sectors are tools that complement some of the recommended policies included in the Policy Roadmap. These are ready to use tools available on the project's website, [www.femminictproject.eu](http://www.femminictproject.eu).



# Methodology and Theoretical Framework

## Methodology

### **Research Design**

This study employs a mixed-methods research design, incorporating both qualitative and quantitative approaches. Qualitative data were gathered through in-depth interviews with women currently working in the ICT sector in the 6 partner countries, gender experts, decision-makers in ICT companies, policymakers and municipalities representatives in each country, and individuals interested in the topic. Quantitative data were collected through surveys based on studies and research conducted by the European Union and the European Institute for Gender Equality (EIGE).

### **Data Collection**

Qualitative data were collected through semi-structured interviews with thought leaders and key figures in Gender Equality and the ICT sector. These interviews were part of two distinct phases:

*R1: "Current state of play enabling the customization of the FEMIN-ICT training programme"*

This phase involved an analysis of the current state of women's participation in the ICT field. The goal was to identify gaps, needs, strengths, and weaknesses within the employment and entrepreneurship ecosystem. The analysis encompassed the theoretical foundations of Gender Equality for the Workplace, national case studies, typologies of different models, evidence-based research on their respective advantages and disadvantages, presentation of applied best practices with examples of existing programs, and considerations of contextual factors.

*R2: "Training program and support package for gender equality"*

The objective of this phase was to enable the ICT business and entrepreneurial ecosystems to self-assess their offerings to attract more women to ICT and to serve their existing female clients in a more customised way.

These interviews and their subsequent analyses allowed participants to share their experiences and perspectives on the topic.

### **Quantitative Data Collection**

Surveys for the quantitative phase were designed to gather information on workplace dynamics, gender inclusivity policies, and perceived barriers to women's advancement in the ICT field.

### **Data Analysis**

Qualitative data were analysed using thematic content analysis. This involved identifying patterns and themes within participants' narratives and comparing these themes between participant countries. This approach provides a comprehensive understanding of the factors influencing women's representation in the ICT sector.

### Theoretical Framework

Quoting from the report “Women in the ICT sector” by EIGE:

“The digitalisation of virtually all sectors of economic activity is providing unique opportunities for economic growth and for a greater inclusion of women in the labour market. The need for STEM and ICT skills is growing in all sectors, from healthcare to manufacturing, opening up new employment options for everybody.

Boosting the number of women in ICT is a major opportunity for the EU. The sector needs highly skilled employees, and women make up the majority of graduates from tertiary education. Redressing the gender imbalance in the ICT sector would also be a good opportunity for women to enter jobs that are more highly paid than those in traditionally

female sectors. This would help reduce the persistent gender-based pay gap across the EU, which is a product of longstanding gender segregation throughout the labour market”.

Understanding why there are more men than women in STEM fields has been widely studied. Researchers have found many factors that keep these imbalances going, including things in our culture, how we teach, and the workplace.

One pervasive factor is the prevalence of Gender Stereotypes within STEM. From the earliest stages of education, these fields are often cast in a masculine light. Teachers and parents tend to underestimate the mathematical capabilities of girls, a bias that takes root as early as preschool. Intriguingly, despite outperforming boys in grades and ICT literacy, girls frequently harbour lower expectations of success in STEM careers (Zacharia Z, et al 2020, Hill C et al, 2010). The culture of STEM is heavily influenced by male dominance. The scarcity of women in these fields reproduces inflexible, exclusionary environments that fail to attract and support female talent (Hill C et al, 2010).

Role models, crucial in shaping aspirations, are not as much disseminated as male role models. Girls have fewer role models to inspire their interest in these fields, seeing limited examples of female scientists and engineers in books, media and popular culture (Benderly BL, 2019). There are even fewer role models of Black women in maths and science (Farheen S, 2021).

An undercurrent of Maths Anxiety and Confidence Gap runs through the educational journey of girls. Female teachers, potentially burdened by maths anxiety, may inadvertently pass on this apprehension to their students, leading to more critical grading. Consequently, a confidence gap emerges, with many girls losing faith in their mathematical abilities by third grade (Wang L, 2020, Cvencek D et al, 2011).

Environmental factors play a pivotal role in shaping Girls' Interest in STEM. Negative stereotypes, coupled with lower self-esteem and a dearth of mentors, impede the pursuit of STEM careers. Additionally, girls' lack of spatial skills further contributes to these barriers (Farheen S, 2021, Hill C et al, 2010).

The academic journey in Universities for Women in STEM presents its own set of challenges. Dissatisfaction with the working environment and a higher likelihood of early exits characterise

the experiences of women in STEM. Moreover, the scarcity of women in these fields subjects them to heightened scrutiny and marginalisation (Hill C et al, 2010).

The issue extends beyond the academic realm, penetrating into the fabric of society. The burdens of Unpaid Labor, encompassing childcare, elderly care, and domestic chores, disproportionately fall on women. The COVID-19 pandemic has further exacerbated these challenges, leading to an increased exodus of women from the workforce (Calo X, et al, 2021, Gogoi P, 2020).

Longevity in STEM careers for women faces hurdles arising from the constant need to prove themselves in Male-Dominated fields. Gender stereotypes and the lack of work-life balance, where caregiving responsibilities predominantly fall on women and contribute to attrition (Steinberg E, 2021, Williams J, 2020, Hofäcker, D. and Stefanie König 2013).

Central and Eastern Europe present a unique set of challenges, including disparities in leadership, unpaid work, legal protections, and political representation (Iszkowska J, 2021). At the EU level, addressing the pervasive issue of Work-Life Balance remains imperative.

In terms of statistical representation, the EU grapples with a stark reality: 8 out of 10 digital jobs are secured by men, with only 17% of digital job employees being women in 2016. Despite incremental progress, the EU has yet to achieve gender parity in the digital sector, underscoring the persistent challenges faced by women in STEM.

The World Economic Forum's Global Gender Gap Report from June 2023 states:

One first point of intervention in improving numbers could be to smooth the transition for female STEM graduates from university to the world of work. While the percentage of female STEM graduates entering into STEM employment is increasing with every cohort, the numbers on the integration of STEM university graduates into the labour market show that the retention of women in STEM one year after graduating sees a significant drop.

FIGURE 2.12

Share of women STEM graduates (Bachelor's degree or higher), by years since graduation

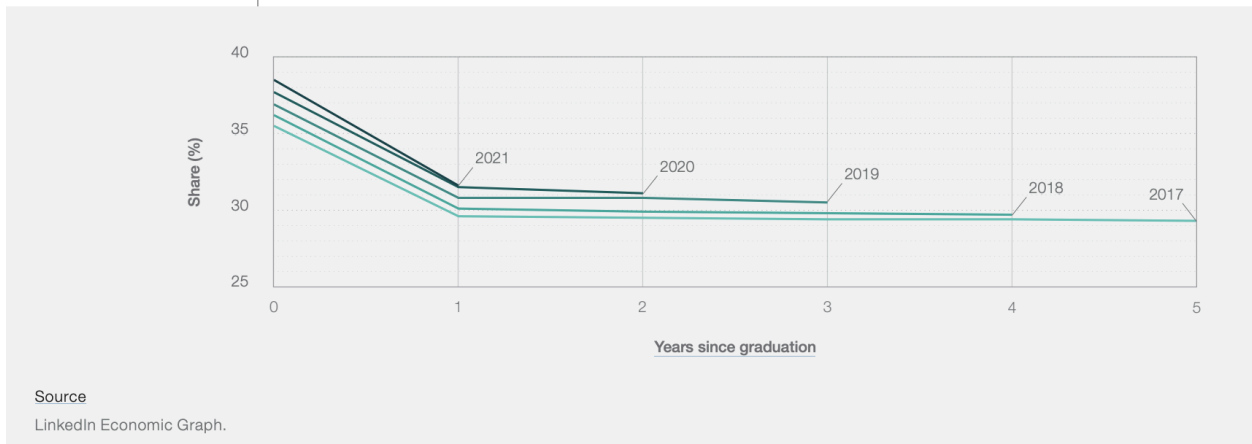


Figure 1: World Economic Forum, Global Gender Gap Report -Share of women STEM graduates (Bachelor’s degree or higher), by years since graduation, referred on this quotation text as “Figure 2.12”)

Figure 2.12 shows that among those graduating with a STEM degree in 2017, for instance, 35.5% were women; a year after graduation, 29.6% of those holding STEM jobs were women (a drop of 5.9 percentage points). In 2021, women comprised 38.5% of STEM degree recipients compared with 31.6% of STEM workers one year following graduation (a drop of 6.9 percentage points). Once in the workforce, however, women are generally less likely to drop out in the first years (until they start climbing the hierarchy, see Figure 2.12). For example, the difference between year 2 after graduation and year 1 after graduation is around 1 or 2 percentage points. When it comes to STEM occupations, women are scarce throughout all industries, apart from Healthcare and Care Services, where they represent 51.5% of the workforce. Gender parity in STEM jobs across industries varies widely. In Technology, Information and Media, for example, the share of STEM occupations stands at 23.4% for women versus 43.6% for men, meaning that women are half (53.8%) as likely to take up STEM employment in this field. In other industries, such as Real Estate, women are only 35% as likely as men to work in STEM, whereas in Agriculture and Education, parity reaches 69% and 61.5% respectively.

FIGURE 2.13 Share of women in the workforce, by seniority level and STEM occupation status

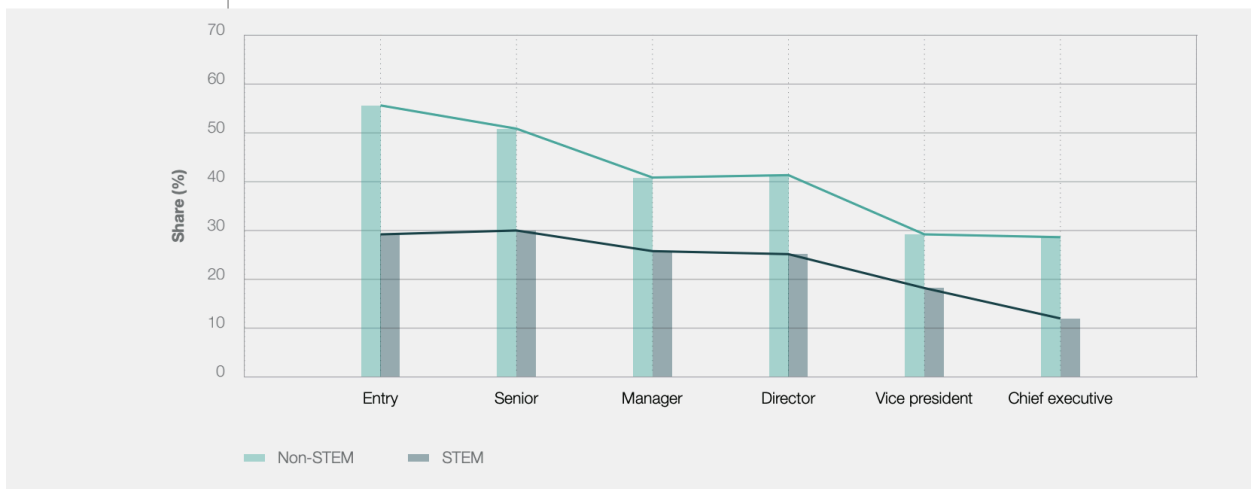


Figure 2: World Economic Forum, Global Gender Gap Report - Share of women in the workforce, by seniority level and STEM occupation status, referred on this quotation text as “Figure 2.13”)

Women generally tend to be underrepresented in leadership roles, but especially in STEM work: they account for 29.4% of entry-level workers and 29.9% of senior workers, but the share of women in Manager or Director positions drops to one quarter (25.5% and 26.7% respectively). Women’s representation in high-level leadership roles such as VP and C-suite drops even lower, to 17.8% and 12.4%, respectively”

## Legal framework - Compliance and Legal Considerations

The legal framework for gender equality is anchored by binding commitments within international law and various agreements.

Based on the Government Communication 2019/20:17, “Sweden's feminist foreign policy”, from the Swedish Ministry for Foreign Affairs, the commitments on Gender equality:

“Encompass declarations and action plans arising from significant events such as the UN

World Conference on Women in Beijing, the UN International Conference on Population and Development in Cairo, UN review conferences, and the pivotal UN Security Council Resolution 1325 on women, peace, and security. Subsequent resolutions and relevant UN conventions on human rights further reinforce these obligations. Integral to this framework are the 2030 Agenda for sustainable development and its implementation tool, the Addis Ababa Action Agenda on financing for development. These documents serve as central pillars for sustainable global development, recognizing gender equality as a fundamental prerequisite for progress across all societal domains.

Within the European context, critical legal documents include EU treaties, the European Convention for the Protection of Human Rights and Fundamental Freedoms, the Council of Europe Convention on preventing and combating violence against women and domestic violence (the Istanbul Convention), the Rome Statute of the International Criminal Court (ICC), and the 1949 Geneva Convention on the protection of victims of war, alongside the 1951 Refugee Convention. Together, these legal instruments form a robust foundation for advancing gender equality within the broader spectrum of legal and policy frameworks”.

On an European Union level, as stated in EIGE on their web page “EU Regulations”:

“All EU Member States have endorsed the main human rights instruments, which oblige them to combat violence against women as a human rights violation, and as a specific gender-related form of violence linked to the discrimination of women. This implies an obligation on Member States to end impunity and prohibit all violence, to take measures to prevent it, to provide adequate protection to survivors, and to ensure redress.

The EU supports an increased protection of women through soft law (communications, recommendations etc.), providing guiding principles, exchange of best practices, and capacity building (for example through the Daphne Programme).

In December 2009, under the Swedish Presidency, the European Union Council adopted the Stockholm Programme (2010-2014), which reinforces the commitment to better address violence against women and children, envisaging greater protection for women victims of violence, including legal protection, comprehensive legislation on victims’ rights,

and a focus on children's rights. Under the Spanish Presidency, the March 2010 Council Conclusions on the Eradication of Violence Against Women in the European Union set the agenda for further measures to effectively combat violence against women. The 2011 Council Conclusions on the European Pact for Gender Equality for the period 2011–2020 reaffirm the EU's commitment to closing gender gaps in employment, education and social protection, promoting better work-life balance for women and men, and combating all forms of violence against women.

While the EU does not have a common policy to deal with gender-based violence, the European Parliament resolution of 26 November 2009 on the elimination of violence against women provides a mandate to take action to end violence against women, an extreme expression of gender inequality.

The European Commission explicitly addresses violence against women through various political instruments, mainly the Strategy for Equality between Women and Men 2010-2015, which follows the Women's Charter (2010) and the Roadmap for Equality between women and men 2006-2010. In May 2011, the Commission proposed a new legislative package to ensure a minimum level of victim's rights, protection, support, and access to justice.

In line with the Women's Charter, which foresees putting into place a comprehensive and effective policy framework to combat gender-based violence, the European Commission proposals have resulted in important binding acts:

- Regulation (EU) No 606/2013 of 12 June 2013 on mutual recognition of protection measures in civil matters;
- Directive 2012/29/EU of 25 October 2012 establishing minimum standards on the rights, support and protection of victims of crime;
- Directive 2011/99/EU of 13 December 2011 on the European protection order;
- Directive 2011/36/EU of 5 April 2011 on preventing and combating trafficking in human beings and protecting its victims, replacing the Council Framework Decision 2002/629/JHA (30). It establishes minimum rules concerning the definition of criminal offences and sanctions in the area of trafficking in human beings, and also introduces



common provisions, taking into account the gender perspective, to strengthen the prevention of this crime and the protection of the victims thereof (Article 1);

- Directive 2010/41/EU of 7 July 2010 on the application of the principle of equal treatment between men and women engaged in an activity in a self-employed capacity;
- Directive 2006/54/EC of 5 July 2006 on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation (recast). This Directive defines harassment and sexual harassment as discriminations on the grounds of sex;
- Directive 2004/113/EC of 13 December 2004 on implementing the principle of equal treatment between men and women in the access to and supply of goods and services. This Directive provides a definition of sexual harassment.

These directives consolidate actions on gender equality by simplifying, modernising and improving European Union legislation in the area of equal treatment for men and women in employment, and play a significant role in shaping the definitions of different types of violence against women and preventing violence against women in its different forms.

In particular, the Directive 2006/54/EC focuses on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation. This directive prohibits “direct or indirect discrimination between men and women concerning the conditions of recruitment, access to employment and self-employment; working conditions, including pay and dismissals; vocational training and promotion; membership of workers’ or employers’ organisations”.

In addition, Article 157 of the Treaty on the Functioning of the European Union prohibits “discrimination on the grounds of sex in matters of pay for the same work or work of equal value. This principle also applies to job classification systems used for determining pay”.

It also legislates in the matter of Equality in social protection, such as parental and adoption leave, where employees have the right to “return to their jobs or to equivalent posts on conditions that are no less favourable to them; benefit from any improvement in working conditions to which they would have been entitled during their absence”.

It should be noted that Chapter III (Remedies and enforcement) of Directive (EU) 2023/970 on rules on pay transparency in relation to equal pay for equal work applies to proceedings concerning any right or obligation relating to the principle of equal pay set out in Article 4 of Directive 2006/54/EC. To date, although the right to equal pay between women and men for equal work or work of equal value is enshrined in Article 157 of the Treaty on the Functioning of the European Union and in Directive 2006/54/EC, the principle has been “hard to apply and enforce”, as the regulation states. The rules set out in Directive (EU) 2023/970 will apply from 7 June 2026.

In addition, the 2008 EU guidelines on violence against women and girls and combating all forms of discrimination against them set out the European Union’s operational objectives and intervention tools for its external action on combating violence against women and girls, including all forms of discrimination directed at them.

The Action Plan to implement the Stockholm Programme and the European Commission’s Strategy for Equality between Women and Men 2010-2015 state that “the Commission will adopt an EU-wide strategy on combating violence against women”.

Sex discrimination is explicitly prohibited in the constitutions of all countries in this consortium. Belgium, Greece, Italy, and Spain have additionally adopted provisions regarding equality between men and women in their constitutions. The Greek Constitution mandates that the legislature and all other state authorities take positive measures necessary and pertinent to promote gender equality in all areas.

In most countries, these constitutional provisions on equality between men and women and the prohibition of sex discrimination can be invoked horizontally, meaning between private parties. Exceptions exist in Italy and Sweden, where this is not possible. In Belgium, horizontal application is a subject of debate.

Regarding equal treatment legislation, all countries have enacted specific equal treatment laws. In Sweden, equal treatment between men and women is part of a broader Anti-discrimination Act that also encompasses other grounds. Belgium and Greece both have an Anti-discrimination Act (which sometimes includes a prohibition of sex discrimination) and a Gender Equality Act.

In November 2023, the Committees on Women’s Rights and Employment reached a consensus on their stance regarding new regulations designed to enhance the authority, resources, and

autonomy of national equality bodies. This decision was based on two proposals from the European Commission outlining standards for equality bodies across member states, with the aim of strengthening the application and enforcement of EU anti-discrimination rules.

Sirpa Pietikäinen, the lead Member of the European Parliament for the Women's Rights and Gender Equality Committee (EPP, Finland), emphasised the crucial role of effective anti-discrimination legislation, noting that legislative measures alone are insufficient without adequate tools. Pietikäinen highlighted the significance of the Equality Bodies Directive, which not only "defines but also harmonises the ways in which national equality bodies can advocate for and support individuals who have faced discrimination". The robust position taken by the Parliament ensures that equality bodies can genuinely assist and defend European citizens against discrimination on an equitable basis in every member state.

In assessing legal gender equality, The World Bank's report "Women, Business and the Law" serves as a key indicator. Notably, all participating countries, except Cyprus, receive a score of 100 in all categories measured by this index (Mobility, Workplace, Pay, Marriage, Parenthood, Entrepreneurship, Assets and Pension). However, a closer examination reveals a nuanced reality when considering the broader issues covered in both this policy paper and the Femin-ICT research across participating nations.

Surprisingly, Cyprus records slightly lower scores in pay equality, as viewed through the lens of the legal framework, and in the family category. This contrast becomes even more apparent when comparing these scores to the EU Gender Index, highlighting Greece's particularly low standing in overall gender equality.

The following legislation contributes to the European framework:

## **Belgium**

In June 2023, Belgium's federal parliament passed a bill aimed at modifying anti-discrimination legislation. The approved changes affect three key acts: the 1981 law targeting specific actions driven by racism or xenophobia, the 2007 law addressing certain forms of discrimination, and the 2007 law targeting discrimination between women and men.

Based on the European Commission's Website on Integration:

The amendments introduced via this bill are expected to have a positive effect on immigrants and people of immigrant descent.

Multiple discrimination is now recognised through 2 categories: cumulative discrimination and intersectional discrimination. The new legal framework also introduces discrimination by association, and discrimination based on a presumed criterion. The Unia website provides practical explanations of these changes.

Additionally, the presiding judge in cases of discrimination may now order positive measures to prevent the recurrence of similar discriminatory acts”.

## **Cyprus**

There is legislation focused on equal treatment between men and women concerning access to employment, vocational training, promotion, and working conditions. The most recent amendment was in 2017 (Law No. 205(I)/2002). Additionally, significant amendments are required to align with the EU Directive on gender equality, specifically the amendment for the Equal Pay between Men and Women for the Same Work or for Work to Which Equal Value is Attributed Law (2007) (Law 176(I)/2007). It's noteworthy that no specific legislation was found addressing women in particular fields; rather, the existing legal framework primarily focuses on general employment rights.

## **Greece**

The Greek legal framework pertaining to employment is characterised by its generality and lacks specific regulations addressing distinct sectors such as the ICT industry. However, there exists legislation, most notably Law 4443/2016 (Government Gazette, Series I, No 232), which explicitly prohibits discrimination in the employment sector.

Law 4443/2016 encompasses a broad range of grounds for discrimination prevention, including race, colour, national or ethnic origin, genealogical descent, religion or other belief, disability or chronic condition, age, social status, sexual orientation, gender identity, or gender characteristics. This legislation applies universally, encompassing both private and public sectors, and extends its coverage to aspects such as access to employment, job advancement, recruitment, dismissal, and work conditions. Additionally, the prohibition of discrimination extends to access to social security, health care, social benefits, and education.

A notable legislative stride towards gender equality is reflected in Law 4705/2020, titled "Corporate governance of public limited liability companies, modern capital market incorporation into Greek law of Directive (EU) 2017/828 of the European Parliament and of the Council, measures for the implementation of Regulation (EU) 2017/1131 and other provisions." Effective since July 17th, 2021, this law mandates the General Assembly to adopt a Suitability Policy, with a mandatory minimum gender quota of 25% for the Board of Directors.

Complementing legislative efforts, the "National Action Plan for Gender Equality 2021-2025" serves as a comprehensive guide. Published by the Greek General Secretariat of Demography, Family Policy, and Gender Equality, this plan aligns with international frameworks such as the UN 2030 Agenda for Sustainable Development and the Council of Europe's Strategy for Gender Equality 2018-2023. The plan prioritises four key areas: preventing and combating gender and domestic violence, ensuring equal participation of women in decision-making and the labour market, and promoting gender mainstreaming in sectoral policies.

An additional noteworthy initiative is the establishment of the Innovation Centre for Women #GIL4W in Greece, announced in 2021. As a partner of the European Centre for Women and Technology (ECWT), this initiative aims to enhance women's participation in STEM and create a platform for entrepreneurship based on high technology, with a specific focus on female talent. Simultaneously, the National Documentation Center (EKT) plays a vital role in enhancing women's digital skills and participation in research and development. As part of the European project GENDERACTION, the Greek NDC actively promotes the inclusion of gender policies.

## **Italy**

There are several upcoming regulations and plans for Italy in the next few years. We have chosen the following to highlight:

*Piano Operativo per la Strategia Nazionale per le Competenze Digitali (Operational Plan for the National Strategy on Digital Skills):*

This ambitious initiative aims to bridge Italy's digital gap by 2025. Developed collaboratively under the guidance of the Technical Committee Guida di Repubblica Digitale and coordinated by the Minister for Technological Innovation and Digital Transformation (MIDT), the plan targets a 70% digital skills proficiency rate among the population, eliminating the gender gap. Objectives include tripling ICT graduates and quadrupling female graduates. The strategy takes a holistic approach to digital skill enhancement.

*Legge GRIBAUDO 162/2021:*

This law focuses on promoting gender equality and supporting women's participation in the workforce. Effective from January 1, 2022, the law mandates the creation of an equal relationship framework for companies with over 50 employees. Certification involves criteria encompassing equal pay, career opportunities, gender equality promotion policies, and motherhood protection. Certified companies enjoy contributory benefits, tax reductions, and priority in fund allocation and tender participation. The law condemns discriminatory acts based on sex, age, caregiving needs, pregnancy, and parenthood, aiming to eliminate disadvantages and restrictions in career progression. The Ministry of Labour is expected to publish a list of companies submitting the required reports.

*GOLFO MOSCA 120/2011 Law:*

The GOLFO MOSCA 120/2011 law in Italy mandates a 40% female quota in the boards of directors and trade unions of publicly listed and investee companies. This law holds historical and legal significance, representing a pioneering framework for corporate gender equality. Failing to comply poses regulatory risks, including fines and, ultimately, the forfeiture of the entire elected body. CONSOB, as an independent authority, oversees compliance and imposes

sanctions, escalating from financial penalties to the removal of the entire board if non-compliance persists. The Presidency of the Council of Ministers oversees sanctions for investee companies, with possible delegation to the Ministry for Equal Opportunities. Notably, the Corporate Governance Committee of participating companies has incorporated gender quotas into the Corporate Governance Code since February 2021, encouraging companies to include these provisions in their statutes.

#### *Fondo Repubblica Digitale:*

The objective is to support projects, selected through calls for tenders, aimed at training and digital inclusion, to increase digital skills and develop the country's digital transition and improve the corresponding indicators of the Digital Economy and Society Index (DESI).

The Fund's intervention methods have been defined by a memorandum of understanding between the government and the Association of Foundations of Banking Origin (Acri).

By assessing the impact of projects, the Fund aims to select the most effective ones - extending their action across the country and reaching more people - in order to offer best practices to the central government to be transformed into policy, to be made structural and permanent.

The Fondo Repubblica Digitale also pursues the transversal objectives of the PNRR: the reduction of the gender and citizenship digital divide.

## **Spain**

An important reference point in Spanish legislation is the Organic Law 3/2007 for effective equality between women and men. This law has made significant changes to the statutes of employees and the basic statutes of the civil service. From 2010 onwards, plans for the equality of undertakings and other measures were regulated through Royal Decree 713/2010. In 2020, Royal Decree 901/2020 amended Royal Decree 713/2010, making it mandatory for companies with 50 or more employees to create and implement an equality plan.

The STEM Women Congress' 2020 report analysed initiatives in Spain to address the gender gap in ICT and promote female talent in STEM. The study highlighted that, on average, 1,200 people are actively working in these initiatives in Spain, with Catalonia showing a higher number of

initiatives and impact. However, only 22% of the considered initiatives receive purely public funding. This emphasises the need for legislative efforts to correct gender barriers in digital education and employment access.

Among the new policies for the digital sphere promoted by the Spanish government, the 'España Digital 2025' agenda is a significant development. This initiative aims to strengthen the digital skills of workers and citizens, targeting 80% of the population with basic digital skills by 2025, including 50% women.

The National Plan for Digital Skills has been formulated to increase digital competences, particularly among disadvantaged groups, and bridge gender gaps in various digital specialties, such as data analytics, Artificial Intelligence, and cybersecurity. As per the new strategy, a comprehensive digital training program is planned for citizenship, digitization, and the development of digital competences in education, and digital skills for both employed and unemployed individuals, focusing on basic and advanced digital technologies, including data analytics, Artificial Intelligence, and cybersecurity.

## **Sweden**

Gender discrimination in the workplace became illegal in Sweden in 1980. With the implementation of the Discrimination Act in 2009, employers are not only required to actively promote equality between men and women but also take measures to prevent harassment. Sweden is additionally committed to achieving equal pay for equal work, as stated in the Discrimination Act, which emphasises that employers and employees should proactively address and eliminate the pay gap between genders.

## **Femin-ICT discoveries**



Situation of Women in ICT for each partner country, discoveries from Interviews and activities

The Consortium conducted surveys and focus groups in the countries where their entities are based. The Target Group was divided into two categories: specific questions for women already in or interested in the ICT sector, and distinct questions for the stakeholders of the Target Group. The Consortium also organised local Multiplier Events and Discovery activities in each country, where participants shared their conclusions and ideas on the topic.

The objective of the discoveries is to show what is missing in the implementation of the law for each partner country, and the differences between their application and the reality of people affected by these laws and regulations.

The conclusions reached for each country are as follows:

## **Belgium**

In response to the question regarding equal participation of women in the ICT sector, the majority of answers pointed to “stakeholder pressure” or a focus on “Corporate Social Responsibility profile”.

The main barrier identified is that women often struggle to initially develop in ICT due to self-perceived limitations. Internal self-doubts and low self-confidence serve as obstacles to their progress. Additionally, the attitude of their environment plays a crucial role; if their social circle does not encourage their involvement and, instead, has a negative influence, their chances of participation diminish. The bias of employers, clients, and colleagues within the workplace was also mentioned as a factor that underestimates and diminishes the importance and potential of women in ICT.

Flexible working hours, telecommuting, and socio-economic provisions such as childcare, vouchers for health and education expenses, and the option for part-time work were

highlighted as measures to address these challenges. Balancing these factors is essential, contributing to a better quality of life and expanding work opportunities.

When asked about the support needed to create gender-responsive environments, respondents emphasised the importance of more training funding, government support, and increased interest from employees, with a strong emphasis on the latter.

Women were found to have no significant gaps or weaknesses regarding digital media. However, there is reluctance among employers to offer leadership positions to women. Although technology is widely used in Belgium, both men and women in the workplace often identify gaps. Efforts are being made to improve technology in the public sector.

## **Cyprus**

According to Cypriot stakeholders, the primary barriers faced by women in the ICT sector include internalised misogyny and a lack of role models. A partner at a major company noted, "Men in power want to hire mini versions of themselves." Existing good practices on a national level are limited.

Some initiatives from non-profit organisations, as well as private sectors like universities, actively promote the inclusion of women in ICT through intensive programs, summer schools, scholarships, etc. Various training, workshops, and conferences are available for women, but they primarily focus on entrepreneurship.

Certain workplaces, due to COVID-19, now offer a more flexible schedule and the option to work from home. However, studies have shown this flexibility to be a double-edged sword for women.

The main motivation for employers and stakeholders to address this issue appears to be its impact on their external image. If they miss out on funding or opportunities due to not meeting set criteria, either internally or from national, regional, or EU institutions, the motivation needed to meet those mandates.

A stakeholder working in academia shared that there was significant resistance initially when pushing for more female representation in her sector. The requirement for gender equality plans in many EU-funded projects, such as Horizon, helped. However, some individuals in the

private sector and academia still aim to merely check a box. Stronger governmental support is necessary in this area. Additionally, career counselling needs to adapt rapidly, as the advice students receive does not currently align with the current labour market needs in Cyprus or abroad.

When seeking the perspective of women in the sector, they primarily attributed challenges to issues like gatekeeping and nepotism. The solutions they propose involve systemic change, the presence of more visible role models, and the implementation of flexible/remote working arrangements, along with enhanced networking and mentoring opportunities. Women in ICT have also raised concerns about outdated career counselling, emphasising the need to 'upskill the youth and university students' and ensure that degrees align with the current labour market.

#### Interview with Ms. Loukia Vasileiou – Software Developer

In an interview conducted in December 2023 by Femin-ICT , Ms. Loukia Vasileiou, Software Developer, addressed the situation of Women in ICT in Cyprus.

Ms. Vasileiou highlighted crucial perspectives on advancing gender diversity in the ICT sector.

Regarding the new remote work bill mentioned on this document, the interviewee anticipates a positive shift in gender representation. The bill's emphasis on flexibility is seen as a catalyst for women to balance ICT careers with other responsibilities. Additionally, the interviewee supports implementing legislation, stressing the importance of visible role models and early exposure through workshops for women in ICT.

The transformative impact of the remote work bill is discussed, with its provisions on cost coverage, technical support, and protection of labour rights expected to remove barriers and foster a more inclusive environment. The interviewee envisions this legal framework empowering women to embrace remote work, ultimately contributing to a more diverse ICT sector.

Expressing a perspective on advancing gender diversity in the ICT sector, the interviewee stresses the crucial significance of implementing legislation and programs aimed at increasing the inclusion of women. Moreover, the interviewee underscores the importance of having

visible role models on a national level, deeming them essential for inspiring and motivating women to pursue careers in the ICT field from an early stage in their education and professional development. The interviewee suggests that actively including women in the sector is a prerequisite before providing support, such as granting flexible working hours. Additionally, the interviewee recommends the early introduction of workshops to provide women with opportunities to explore and gain a deeper understanding of the ICT sector before making crucial career decisions, recognizing that this early exposure can significantly impact their interest and confidence in pursuing ICT-related careers.

## **Italy**

During the discovery work, the importance of structural change was highlighted to eliminate gender stereotypes. It's not just about individual decisions; it's a matter that involves both family and society. Additionally, the discussion touched upon the reasons behind the prevalent pressure and fear of failure in the digital space. The constant evolution and 'flexibility' that leaves individuals with no time off can be intimidating.

Certainly, a change is needed. The question arises: where and with whom should more urgent and timely action be taken? Opportunities must be created to reshape recruitment and training methods, with a focus on educating young girls and encouraging their participation in the sector, including support for startups.

The Italian labour market is marked by a high incidence of skill-mismatch— a situation where the skills possessed by the labour supply (workers) differ from those demanded by companies. Companies face difficulties in finding staff with basic digital skills. The challenge increases when specific mathematical and computer skills are required. Notably, there is a shortage of graduates in electronic and information engineering, graduates in mathematical, physical, and computer science, and those in chemical-pharmaceutical, mechanics, mechatronics, and energy, and electrical engineering.

Despite the increasing participation of women in the workforce in recent years, and despite the overall direction of political and business strategies towards fostering women's involvement in the labour force to address gender gaps and access inequalities, a crucial objective has often

been sidelined. This objective pertains to the activation of policies that facilitate the reconciliation between family and work, simultaneously encouraging men's commitment to caregiving responsibilities.

Interview with Cecilia Del Re, Lawyer, politician, and former City Council Officer for business and digital innovation in the City of Florence

In an interview conducted in December 2023 by Femin-ICT, Cecilia Del Re, Lawyer, politician, and former City Council Officer for business and digital innovation in the City of Florence, a prominent figure in digital innovation and women's entrepreneurship, addressed key measures for fostering gender equality and digital inclusion in Italy.

Regarding parental leave and unpaid care duties, she mentioned: “In terms of parental leave, Italy is still far behind other European countries. The leave for fathers has gone from 2 days to 10, while in Spain it is 4 months. This obviously has an impact on the distribution of care obligations in couples to the detriment of women, and also violates the right of fathers to assist and actively participate in the upbringing of their children. Moreover, the fact that women can benefit from long periods of leave makes them less attractive in hiring selections. This of course cuts across all professional fields, not just ICT. It is undoubtedly a crucial aspect on which Italy still has to catch up both culturally and from a regulatory point of view”.

Advocating for digital education beyond compulsory schooling, Del Re proposed university-level courses to equip students with diverse digital applications. She stressed the importance of basic digital skills for employability, citing a successful project supporting women without degrees. Del Re called for strong political will to drive digitization initiatives, emphasizing the need for sustained funding at the local level. She urged the integration of digitalization funds into municipal budgets.

Sharing experiences supporting female entrepreneurs, Del Re noted the importance of sustained support beyond the initial phase, as she said: “it is not enough to accompany future female entrepreneurs in the initial phase, but also to provide forms of accompaniment and support in the first years of starting the business”. She critiqued rhetoric on equal opportunities,

urging concrete actions and spotlighting the role of institutions in addressing workplace issues, specially on addressing harassment and issues on male-dominated industries like ICT, where “Many women who suffer harassment, retaliation or mobbing in the workplace do not report their colleagues or superiors for fear of possible retaliation, this is an issue that should be a priority”.

Highlighting the need for gender-sensitive urban planning, Del Re advocated for the active participation of women in shaping cities and services. She identified a gender gap in city design historically created by men, emphasising the importance of inclusivity.

The interview concluded with insights on additional measures, including blind hiring practices, awareness campaigns for ICT careers, and addressing limited career growth for women in ICT. Del Re expressed support for quotas and underscored the significance of showcasing both famous and "ordinary" women as inspirational models. She emphasised the need for a supportive community and concrete tools to advance gender equality.

## **Greece**

It is our understanding that Greece is suffering from the “leaky pipeline phenomenon” in this aspect, which refers to women who study STEM in higher education but do not necessarily transition into a relevant career. One point raised is that recruiting women is not problematic, but the challenge lies in their promotion. A participating professional noted that women often move into fields like biomedicine or design, even though their education is in software engineering. They highlighted the proactive efforts of women professionals to prove their worth, but despite their efficiency, many do not progress in their careers. Decision-making, especially for those with families, involves careful consideration.

A general observation is that few women study STEM, resulting in a scarcity of women in ICT careers. Participants shared examples from their own companies, acknowledging the global trend of recognizing employees' need for work-life balance. Gender stereotypes were recognized as harmful, impacting both men and women by shaping expectations in the work environment based on gender. Participants suggested the need for companies to establish

procedures and regulations for reporting incidents of sexism and discrimination, ensuring appropriate responses.

Discrimination and gender-based stereotypes were cited as barriers preventing equal respect and recognition in male-dominated environments. An interesting point emerged about women valuing stability, making them reluctant to change positions or jobs. This stability enables them to balance work and household responsibilities, an expectation largely placed on them.

During the focus groups, a consensus emerged on the need for a shift in company culture and policies to encourage and support women. Participants shared strategies such as promoting women to higher positions to serve as role models, endorsing work-life balance by allowing employees to choose their work pace, and hiring women over 50 in ICT positions. Some companies developed strategic plans, including small-scale career orientation in public schools to encourage girls to pursue ICT careers.

Participants stressed the crucial role of family and role models in perpetuating behaviours that reinforce gender stereotypes. The importance of education, both within families and in schools, was emphasised. This involves encouraging males to share family responsibilities and promoting STEM skills without associating hard and ICT skills solely with males. Engaging men in efforts against sexism and stereotypes was mentioned, highlighting the need for male role models actively involved in family life. The power of role models, particularly women teaching ICT and holding leading roles in challenging ICT positions, was emphasised.

#### Interview with Dr. Zefi Dimadama, General Secretary of Equality and Human Rights, Greece

In an interview conducted in December 2023 by Femin-ICT, Dr. Zefi Dimadama, General Secretary of Equality and Human Rights, Greece, reflected on the Greek situation.

She mentioned that a significant hurdle faced by the country is the absence of a unified platform for gathering data from all Ministries, hindering cross-data analysis. The interviewee stressed the imperative to establish collaborative discussions involving NGOs, workers, governments, and municipalities to address this issue collectively.

While Greece boasts robust laws addressing women's realities, Dr. Dimadama concerns arise regarding the effective implementation and impact due to the lack of law enforcement and

audits. To bridge this gap, the interview highlighted the crucial need for collaboration among political parties, despite their differences, to foster productive conversations for the benefit of the people.

At the European Union level, a call was made for Greece to take a more proactive stance, exploring cooperation avenues, participating in committees, and contributing to a collective effort. While a national plan for Equality exists, there is a pressing need for long-term plans that transcend the typical four-year government cycle, ensuring continuity and progress.

Persistent stereotypes surrounding women in Greece, limiting their professional choices and perpetuating expectations of unpaid household and care duties, were also discussed. Proposals, such as financial support to parents for child care, are under consideration to challenge and reshape these stereotypes.

The interview shed light on the innovative Greek Equality Tag initiative, which incentivizes companies with exemplary practices in gender equality. This initiative has gained significant interest from companies eager to participate, indicating a positive momentum.

The active involvement of men was emphasised as crucial for meaningful change. Dr. Dimadama stressed the importance of associating parenting by males with happiness and the joy of being present in their children's lives. Early intervention in schools to introduce and encourage ICT careers was identified as a strategy to ensure equal opportunities for all.

While local authorities were urged to play a more active role in promoting gender equality, achieving a balance in strategies between national and municipal governments remains a challenge.

Gender representation in politics emerged as a concern, with only 25% of women in the parliament and a small number of female mayors. The interview highlighted media bias towards women, both on social and traditional media platforms, exacerbating the issue and underscoring the need for comprehensive change.

## **Spain**

More than half of Spanish companies employing specialists in the technology sector do not have



women among their profiles. This means that only 1 out of 3 enterprises has at least one woman with these specialist skills. However, the national report drafted by the Ministerio de Asuntos Económicos y Transformación Digital in 2022 on the digital gender gap also offers an analysis according to the size of the companies considered. While only 5.7% of the total Spanish companies have female ICT specialists among their employees, the number rises proportionally if only companies with more than 250 employees and with technology specialists are taken into account; in this case, 61% are women.

Moreover, data collected in the Women in Digital Scoreboard 2021 show that Spain suffers from the common European problem of the digital gender skills gap. The presence of women in ICT needs to increase, and equality strategies need to be implemented. Female students in STEM represent only around 14%, making equality campaigns crucial for the future.

Across the board, women are often expected to be the primary or sole contributors to domestic duties. As a result, they tend to choose jobs that allow more time for these responsibilities, take fewer risks, and, despite their contributions, their work is not always seen as equally important. Women value stability and face slower career progression.

Flexibility in work hours is considered important universally, along with better knowledge of female role models and increased confidence in women's worth and abilities. One of the main motivators for change appears to be external pressure, whether from stakeholders, government, the EU, or societal expectations for gender equality in the workplace.

We acknowledge also that networking is an important skill for women to develop and needs to be emphasised as a key for their professional success.

Interview with Dr. Silvia Rueda Pascal, Advisor in the Cabinet of the Minister of Science, Innovation and Universities. Director of the Women and Science Unit

In an insightful interview, Dr. Silvia Rueda Pascal, Advisor in the Cabinet of the Minister of Science, Innovation and Universities and Director of the Women and Science Unit of Spain shared, as an Informatic Engineer, a firsthand understanding of the challenges faced by Women in ICT in Spain. Emphasising agreement with the findings of Femin-ICT's investigation, the

interviewee highlighted the perpetual struggle women face, often being on the wrong side of societal expectations due to factors like age and family status.

The interviewee stressed the importance of positive affirmation actions, asserting that such initiatives should carry the weight of legal enforcement to foster change across society. Reflecting on the historical trajectory of women in STEM, she noted a decline in female representation in ICT/STEM University careers from 30% in the 80s to a concerning low of 12% in 2016/2017, with a slow but steady recovery in recent years.

A significant revelation was the impact of perception on female participation in STEM. The fear of complexity and societal stereotypes, particularly the notion that STEM professionals are perceived as "freaks," contributes to a hesitancy among girls and young women to pursue these careers, as the Interviewee affirmed that girls, as starting at the age of 6, they don't consider themselves very smart, and at the age of 12, they don't have role models. Instead, they are pressured by social expectations around their appearance, to be pretty, to be concerned and occupied with their physical appearance instead of their careers. This was evidenced by a 10% decline in female engagement when academic degrees transitioned from Masters to Engineering.

Education emerged as a critical factor, with the interviewee advocating for the introduction of Technology concepts from Primary school. She highlighted the current optional and extracurricular nature of technology assignments as a hindrance to broader participation, attributing it to the prevailing societal expectation that children should be available at home to assist with domestic chores.

The conversation delved into the broader societal dynamics, including the need for a reevaluation of co-responsibility in unpaid care duties and household chores. The interviewee expressed concern about the masculinization of STEM and ICT careers, calling for a concerted effort to 'feminise' the sector and increase female representation in leadership roles.

A notable legislative development discussed was the approval of mandatory equality plans for companies, with a shift in focus from punishment to recognition. This forward-thinking approach aims to acknowledge and celebrate companies that actively contribute to gender equality.

Despite acknowledging Spain's progress in gender equality, the interviewee underscored the importance of remaining vigilant and proactive. In a field with a high demand for ICT professionals, she highlighted the untapped potential of women in driving innovation and research while emphasising the need for a holistic approach to managing work, colleagues, and family responsibilities.

## **Sweden**

In Sweden, companies recognize the need for greater diversity in the workplace, a decision often prompted by external factors such as legal requirements, investor expectations, and benchmarking against competitors. Initiatives for inclusivity within organisations are seen as a response to current trends, ensuring competitiveness and maintaining relevance. Decision-makers are motivated by the desire to stay relevant and foster a workplace that attracts top talent.

Despite Sweden's high ranking in gender equality, gaps persist. Businesses have been slow to prioritise building diverse teams, with women still taking more parental leave and men predominantly holding senior positions. The challenge of recruiting women quickly is compounded by the speed-focused nature of the startup scene, where diversity and inclusion may be deprioritized.

Societal barriers contribute to challenges in women applying for jobs. Women often wait until they meet 90% of the prerequisites in a job description, unlike men who apply when they meet 60%. Retaining women is also challenging, as they may feel uncomfortable or unsafe being the only female in a team. Sweden provides strong social support infrastructure, including accessible and extensive childcare services.

The language used in job advertisements and the lack of diverse role models present significant obstacles. Women are not sufficiently encouraged to pursue tech careers from their early education, where the industry is perceived as complicated and time-consuming. Women may initially opt for socially-oriented careers, assuming they will have more time, only to find these

paths demanding and with lower salaries. The benefits of a tech career are not effectively communicated to attract women to the industry.

The systemic issue extends to the workplace dynamics, where the workforce is often framed around a group of friends. Men prioritise networking and relationship-building, while women may work in isolation, being the minority in teams. 'Meetings after the meeting' often exclude women, who, to prove their capabilities, focus on a wider range of tasks. Despite women often outperforming men academically, the latter's emphasis on building early career relationships contributes to their later advancement.

Discrimination in Sweden is often subtle, with women taking on more parental workload. The journey of motherhood can act as a setback to career advancement, despite a supportive childcare system, which does not affect men in the same way.

# Scenarios for changes and innovation

Goal: Digital Agenda for Europe - guidelines and objectives

The Digital Decade policy program outlines specific targets and objectives for 2030, steering Europe's digital transformation. In relation to ICT specialists, it aims to achieve the goal of having 20 million ICT specialists while also considering the necessary gender convergence.

The Decision EU 2022/2481 of the European Parliament and of the Council of 14 December 2022, which established the Digital Decade Policy Programme 2030 states:

“Digital skills, basic and advanced, as well as other skills, including in the domains of science, technology, engineering and mathematics (STEM), are essential to speeding-up the adjustment of the Union industry to structural changes. It is intended that digitally empowered and capable citizens, including those with disabilities, are able to take advantage of the opportunities of the Digital Decade. To pursue that aim, there should be a focus on education to ensure that the education community, in particular teachers, is adequately trained, skilled and equipped to use technology effectively in its teaching methods and is able to teach digital technologies to ensure that students are better equipped to enter the labour market in the short and longer term. Digital education and training should also enhance the Union’s attractiveness for high-skilled professionals who have acquired advanced digital skills and their availability on the Union labour market.

The Digital Economy and Society Index (DESI) 2021 published by the Commission states that even before the COVID-19 pandemic Union businesses, in particular small and medium-sized enterprises (SMEs), struggled to find information and communications technology (ICT) professionals in sufficient numbers. Digital training and education should therefore support all the actions to ensure that the workforce is equipped with the necessary current and future skills supporting the mobilisation of, and the incentive for, all relevant stakeholders to maximise the impact of investments in improving existing skills (upskilling) and training in new skills (reskilling) as well as life-long learning by the active population, in order to ensure

that full advantage is taken of the opportunities of the digitalisation of industry and services. Non-formal digital training provided by employers in the form of learning-by-doing should also be encouraged. Education and training will also bring concrete career incentives to avoid and eliminate differences in opportunities and treatment between women and men”.

To that extent, the targets established are the following:

“The European Parliament, the Council, the Commission and the Member States shall cooperate with a view to achieving the following digital targets in the Union by 2030 (the ‘digital targets’):

A digitally skilled population and highly skilled digital professionals, with the aim of achieving gender balance, where: at least 80 % of those aged 16-74 have at least basic digital skills; at least **20 million ICT specialists are employed within the Union, while promoting the access of women to this field and increasing the number of ICT graduates”.**

Reach level for each partner country



Figure 3: European Commission, Report on the state of the Digital Decade 2023 - Individuals with Basic Skills and ICT specialists in the European Union in 2023 vs 2030 Target. Source: Report on the state of the Digital Decade 2023.

The Digital Decade policy programme 2030 sets up an annual cooperation cycle to achieve the common objectives and targets. This governance framework is based on an annual cooperation mechanism involving the Commission and Member States.

This section is based on the European Commission's annual report in which the Commission evaluates progress and provides recommendations for actions. Report on the State of the Digital Decade 2023,' which emphasises the need to accelerate and deepen collective efforts to align to the European Declaration on Digital Rights and Principles for the Digital Decade. The report delves into the digital technologies, skills, and infrastructures situation in each country.

Regarding the number of ICT specialists in the region, the document states:

“Ensuring an adequate number of ICT specialists is critical for a successful digital transformation . As reliance on digital technology increases, the workforce must keep up with the evolving skills demand and the objective of regaining leadership. While the number of ICT specialists employed in the EU is growing, so is the number of companies operating in the ICT sector, and a majority of companies looking for ICT specialists continue to report substantial difficulties in recruitment. The lack of available staff with the right set of skills is hampering investments for 85% of EU firms, with SMEs struggling more often in filling ICT vacancies. The EU needs to step up its efforts in the global race for talents and particularly in the field of science, technology, engineering, and mathematics (STEM). Despite the numerous initiatives and EU funding programmes that play a significant role in developing, attracting, and retaining skills, under a business-as-usual scenario, the number of ICT specialists in the EU will be close to 12 million by 2030. Hence, Member States should collectively more than double the average increase of ICT specialists to close the gap with the Digital Decade target. Innovation depends on the successful nurturing, attraction and retention of talented individuals and a diverse array of skills. High-quality education from early stages and attractive working conditions are key to attracting and ensuring a flow of highly skilled and talented individuals who can help contribute to the digital transformation and give the EU a competitive edge in strategic value chains. Leveraging women’s contributions is essential for tackling the shortage of ICT specialist skills and building an inclusive digital Europe. The severe and persistent gender gap in the ICT sector undermines how digital solutions are designed and deployed, with proven negative consequences for social equality and welfare overall. In 2021, 81% of employed ICT specialists were male. To

increase the number of women in ICT, all EU Member States must take action to promote their access to this field starting from an early age”.

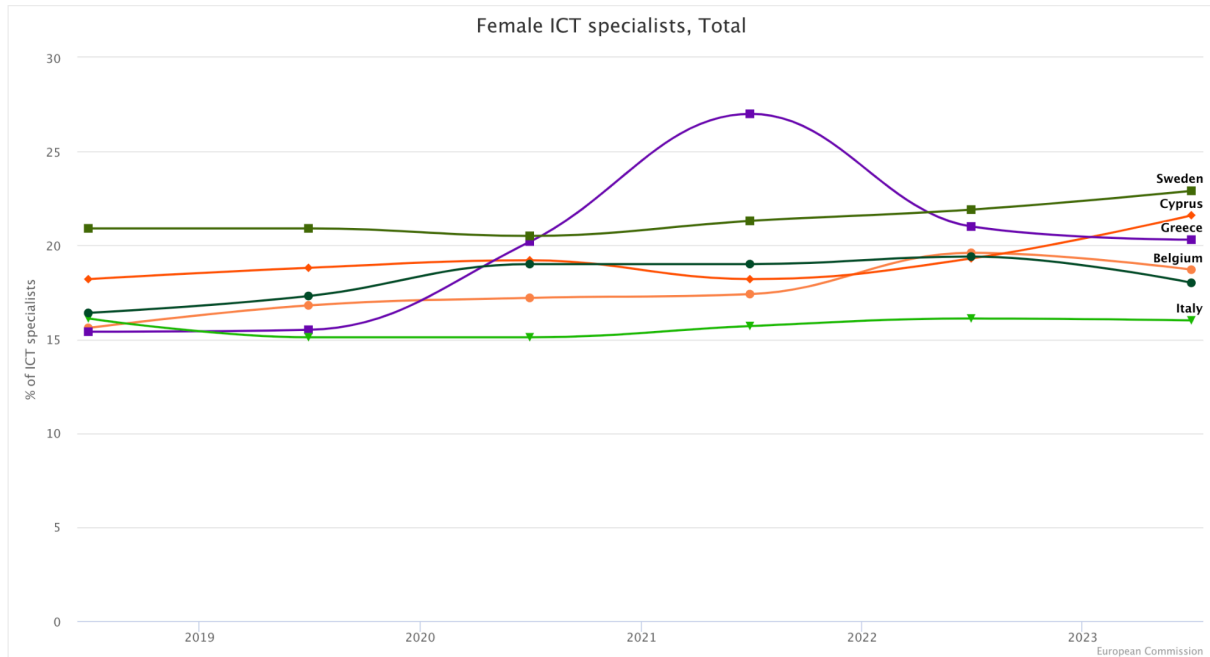


Figure 4: Progression of percentage of Female ICT Specialists, from 2018 to 2023, for the 6 partner countries for Femin-ICT. Employed female ICT specialists: Broad definition based on the ISCO-08 classification and including jobs like ICT service managers, ICT professionals, ICT technicians, ICT installers and servicers. Data Source: Eurostat, Table isoc\_sks\_itsps: ICT specialists by sex.

Source: European Commission: Digital Decade DESI visualisation tool, Compare countries progress.

## Belgium

The European Commission's “Report on the state of the Digital Decade 2023” mentions:



“Close to half of Belgium’s population does not have basic digital skills. The level of basic digital skills in Belgium is at the EU average of 54%, but significantly below the Digital Decade target of 80%.

The share of ICT specialists in the Belgian workforce is 5.6%, which is above the EU average of 4.6%, despite a lower-than-average number of ICT graduates (2.8% versus 4.2%). However, at 18.7%, the share of women among the ICT specialists is slightly below the EU average of 18.9%.

Belgium should accelerate its efforts in the area of digital skills, in particular basic digital skills. Attention should be paid to improving the coordination of digital education policy and strengthening the involvement of relevant stakeholders across the whole country”

## Cyprus

The European Commission's “Report on the state of the Digital Decade 2023” mentions:

“Only 50% of the population in Cyprus have at least basic digital skills, which is 4 percentage points below the EU average. Nonetheless, in 2022, several initiatives to support digital skills development and strengthen the digital fitness and capacity of people were ongoing under the umbrella of Cyprus' objective, with the support of the RRF (Recovery and Resilience Facility), is to improve digital skills in all population groups including upskilling and reskilling the workforce. Cyprus shows commitment to contributing to the collective effort to achieve the Digital Decade target on ICT specialists. Indeed, in 2022, Cyprus reached the EU average of ICT specialists in employment (4.6%). Moreover, at 21.6%, the share of women among ICT specialists is higher than the EU average of 18.9%. National Digital Skills Action Plan 2021-2025 Cyprus should accelerate its efforts in the area of digital skills, putting a special focus on training people over 55 and other vulnerable people should contribute to improving the overall level of digital skills of the population. Building on the Year of skills, targeted actions for awareness raising on the training courses available for the population is necessary to meet the Digital Decade objectives and targets”

## Italy

The European Commission's "Report on the state of the Digital Decade 2023" mentions:

"Italy's progress in digital skills remains slow, contributing only modestly to the Digital Decade target. Only 46% of the population have basic digital skills. This undermines their capacity to benefit from digital opportunities and to exercise their digital citizenship and has a negative impact on Italy's inclusiveness. Italy adopted a specific national strategy and included reforms and investments in the Resilience and Recovery Plan (PRR) which are intended to increase the level of digital skills.

While the importance of developing new skills and updating job profiles is recognised as a priority, the number of enterprises actually offering training to their employees is still insufficient.

Italy's number of ICT graduates remains significantly below the ambitions for the EU's Digital Decade, as the country is unable to meet the business demand for qualified professionals. Even though the offer to provide training is evolving and has been expanded by new flexible training offers focusing on STEM, the share of ICT graduates remains at 1.5%, which is insufficient and significantly below the EU average of 4.2%. Moreover, the share of women among ICT specialists is 16%, well below the EU average of 18.9%.

Italy should step up its efforts on digital skills in particular in upskilling and reskilling its labour force. Moreover, it should introduce skills forecasting to match the needs of its labour market and improve cooperation particularly with industry and civil society. Italy should increase the capacity of the educational systems to train more ICT specialists, leveraging the RRF (Recovery and Resilience Facility) funding"

## Greece

The European Commission's "Report on the state of the Digital Decade 2023" mentions:

"More than half of Greece's population have at least basic digital skills (52%), close to the EU average (54%). The percentage of ICT specialists in total employment in Greece is 2.5%, among the lowest in the EU. The share of women among ICT specialists is, at 20.3%, however above the EU average of 18.9%. The current outlook is weakened by several factors, such as the brain drain of digital talent, the lack of specialisation sought after by companies, which should be regularly screened, and the insufficient number of ICT graduates".

## Spain

The European Commission's "Report on the state of the Digital Decade 2023" mentions:

"The Spanish authorities have made significant endeavours in recent years, laying the foundation for an ambitious digital transformation of the Spanish economy. Spain has made significant progress in all four dimensions of the Digital Decade. The 'Digital Spain 2026' strategy, which is aligned with the Digital Decade Policy Programme, was presented in 2022 to further promote the digital transformation through a set of reforms and significant public and private investments.

More than one third of Spain's population does not have basic digital skills.

Nonetheless, Spain is a good performer in at least basic and above basic digital skills, with 64% and 38% of the population benefiting from these skills respectively, which is above the EU average. The country continues to progress in increasing the percentage of ICT specialists in the workforce, where it stands slightly below the EU average (4.3% vs 4.6%), and the percentage of ICT graduates, where it exceeds the EU average (4.8% vs 4.2%). The share of women among the ICT specialists is at 18% just below the EU average. This contributes to narrowing the gap to the continuously growing demand. Spain is implementing several measures to increase the number of ICT specialists, notably a new law to modernise the

vocational education and training system (VET), approved in March 2022, and a new VET specialisation course on AI and big data.

Spain should accelerate its efforts in the area of digital skills, notably in the upskilling and reskilling of the labour force, in particular, in advanced and emerging technologies, to address the lack of ICT specialists. Additionally, Spain should continue to encourage more students to specialise in ICT and promote diversity and a gender-balanced uptake of this subject, reducing any possible stereotypes in the teaching and learning of informatics”.

## Sweden

The European Commission's “Report on the state of the Digital Decade 2023” mentions:

“Sweden's population has a high level of digital skills and is expected to make an important contribution to reaching the Digital Decade target. In 2023, 67% of people aged 16-74 in Sweden had at least basic digital skills, above the EU average of 54%. Several ongoing initiatives seek to further improve the digital skills level of the Swedish population. With 8.6%, the share of ICT specialists in total employment is well above the EU average (4.6%). The share of women among ICT specialists is, at 22.9%, also above the EU average (18.9%). However, industry underlines that the demand for ICT specialists is still not being met. It is important that Sweden steps up efforts to address this issue, also in view of contributing to the Digital Decade target on ICT specialists. Sweden should continue implementing its policies in the area of digital skills. To meet the increasing demand for ICT specialists, Sweden should closely monitor plans to encourage more students to specialise in ICT by implementing specific, time-bound, and measurable actions that would improve traceability, evaluation, and follow-up of programmes and their impact on the population.”

## Policy Roadmap - Call to action and suggestions of priorities for each partner country

Drawing upon the mentioned considerations and our findings throughout the course of the project, it is clear that there is a compelling need to take proactive measures to boost the amount of people working in the field of Information and Communication Technology (ICT) on an European level, and more importantly, the representation of women. Given what we've uncovered so far, we suggest the following strategic next steps to boost the number of women working in ICT, aiming for a more inclusive and diverse landscape in this rapidly evolving field.

At the European Union level, several noteworthy findings that are common to all countries in the Consortium have emerged:

- Government support is crucial in strengthening childcare systems and addressing care duties, underscoring that this responsibility should not solely rest on the actions and programs of individual companies. Additionally, fostering a cultural discussion around these matters is essential for creating awareness and promoting a collective understanding of the importance of shared responsibility.
- Persistent stereotypes surrounding women in the workforce, particularly concerns about potential pregnancies and the perception of less career consistency due to family care responsibilities, still hinder their progress.
- Despite regulations and discussions around the topic, women migrants are still more likely to be unemployed or economically inactive than any other group in the European Union labour market.
- There is a need for a critical examination of laws and regulations that, despite their existence, do not independently foster progress as expected. This calls for a closer look at the effectiveness and impact of existing legal frameworks to ensure they contribute meaningfully to gender equality and the advancement of women in the workforce, particularly in the ICT sector.

- Women entrepreneurs face a disparity in funding compared to their male counterparts and, additionally, are subject to heightened criticism and scrutiny, particularly regarding their ability to sustain solo ventures.
- Shifting the responsibility for diversity and inclusion initiatives from a sole manager to a collective effort involving all company members is crucial.
- In the pursuit of gender equality, it's essential to broaden the conversation to include men actively, and discuss their role in unpaid caregiving and household responsibilities.

On a local level for each country, the proposed actions are:

### **Belgium**

1. Promote digital literacy, prioritising expanding the population with essential digital skills and communicating the benefits of an ICT-related career.
2. Implement programs or initiatives aimed at empowering women in the ICT sector by addressing self-perceived limitations. This could include mentorship programs, workshops, or awareness campaigns to boost self-confidence.
3. Advocate for legislation that recognizes and compensates unpaid caregiving and household responsibilities.
4. Review and modify current legislation to address and rectify gender pay gaps, ensuring equitable remuneration for all.
5. Intensify efforts to strengthen ICT education for women, addressing the underrepresentation of female graduates in ICT courses.
6. Foster increased interest and engagement from employees in creating gender-responsive environments.
7. Enhance women's representation in leadership roles by adding quotas or any other affirmative action measure.

### **Cyprus**

1. Grant flexible working hours for women. Implement flexible scheduling policies that allow women to balance work and personal responsibilities, provide options for remote work or telecommuting to accommodate diverse needs.
2. Address unpaid caregiving and household responsibilities and homelabor at a cultural level to raise awareness.
3. Recognize and address obstacles faced by women in the ICT sector, including internalised misogyny and a lack of role models.
4. Implement legislation and programs aimed at increasing the inclusion of women in the ICT sector, not merely relying on nonprofits and companies to take the initiative on these topics.
5. Promote role models for Women in ICT on a National level.
6. Embed ICT education in national curricula and provide adequate information to youth considering ICT careers. Add workshops from an early age to give women and girls early exposure to knowledge and a deeper understanding of the ICT sector before making crucial career decisions.
7. Adopt blind hiring practices for bias mitigation and include women as gatekeepers for hiring purposes.

## Italy

1. Add ICT assignments into national curricula on early stages of education and provide adequate information to youth considering ICT careers.
2. Encourage workplace and societal dialogues on unpaid caregiving and household responsibilities and how those hinder the progress of Women in labour, specifically on ICT.
3. Address changes to be made to parental leave and discuss the importance of balance for both parents.
4. Promote awareness of the benefits of ICT careers.
5. Investigate barriers to Women's career advancement in ICT, addressing a male-dominated culture in ICT organisations.

6. Combat workplace gender-based discrimination in ICT as a male-dominated field. Educate about the importance of generating workplaces respectful of diverse individuals and the importance of diversifying industries.

## Greece

1. Embed ICT assignments into national curricula on early stages of education to get awareness into the benefits and boost entry rates into ICT careers.
2. Embed ICT education in national curricula and provide adequate information to youth considering ICT careers.
3. Address changes to parental leave policies and discuss the importance of achieving a balance for both parents.
4. Improve access to childcare facilities.
5. Elevate female employment rates in the ICT Sector by adding gender parity quotas or any other affirmative action measure.
6. Enhance women's representation in leadership roles by adding quotas or any other affirmative action measure.
7. Combat workplace gender-based discrimination in ICT as a male-dominated field. Educate about the importance of generating workplaces respectful of diverse individuals and the importance of diversifying industries.
8. Establish policies for employees with caregiving responsibilities. Implement flexible scheduling policies that allow women to balance work and personal responsibilities, provide options for remote work or telecommuting to accommodate diverse needs.
9. Address career drop-outs among women. Establish procedures and regulations for reporting incidents of sexism and discrimination, ensuring appropriate responses.
10. Engage men in efforts against sexism and stereotypes, highlighting the need for male role models actively involved in family life.
11. Highlight role models, particularly women holding leading roles in challenging ICT positions.
12. Engage local authorities to expand STEM initiatives beyond urban centres.



13. Increase support for women entrepreneurs seeking funding.
14. Focus on re-entry, retention, and progression of women in tech roles, independently on their age.

## **Spain**

1. Promote higher enrollment of women in ICT-related degree programs.
2. Encourage workplace and societal dialogues on unpaid caregiving and household responsibilities and how those hinder the progress of Women in labour, specifically on ICT.
3. Combat workplace gender-based discrimination in ICT as a male-dominated field. Educate about the importance of generating workplaces respectful of diverse individuals and the importance of diversifying industries.
4. Highlight role models, particularly women holding leading roles in challenging ICT positions.
5. Address the disparity between norms/policies and their implementation. Establish oversight mechanisms to ensure the effective implementation of policies that benefit the general population.
6. Bridge the enforcement gap between norms in the public innovation sector and the private sector.

## **Sweden**

1. Integrate migrant women workers into ICT by adding parity quotas or any other affirmative action measure.
2. Promote higher enrollment of women in ICT-related degree programs.
3. Combat workplace gender-based discrimination in ICT as a male-dominated field. Educate about the importance of generating workplaces respectful of diverse individuals and the importance of diversifying industries.

4. Challenge gendered norms and advocate for more intersectional policies.
5. Engage men in efforts against sexism and stereotypes.
6. Avoid women as sole resources for issue resolution. Ensure initiatives go beyond focusing solely on women and actively challenge the underlying structural barriers.
7. Reinforce the communication about the need of having more women in ICT careers, showcasing and reflecting on opportunities instead of challenges / problems.
8. Taking advantage of Swedish flat organisational structures, shift the responsibility for diversity and inclusion initiatives to a collective effort involving all company members.
9. Strengthen the conversation surrounding equitable parental leave practices within the family, encouraging a balanced approach for both parents.

## Conclusions

Our comprehensive analysis combines both a policy overview of European and national laws that apply to gender equality, specifically in ICT, and actionable suggestions resulting from research, interviews, and focus groups implemented during the project. Across European countries, it highlights the pressing need for concerted efforts to address gender disparity in the Information and Communication Technology (ICT) sector. The identified challenges, while being diverse for each partner country, collectively point to a clear path forward for fostering a more inclusive and diverse landscape within the rapidly evolving field of ICT.

At the European Union level, government support is crucial in strengthening childcare systems and addressing care duties, underscoring that this responsibility should not solely rest on the actions and programs of individual companies. Additionally, fostering a cultural discussion around these matters is essential for creating awareness and promoting a collective understanding of the importance of shared responsibility. Persistent stereotypes surrounding women in the workforce, particularly concerns about the perception of less career consistency due to family care responsibilities, still hinder their progress.

Despite regulations and discussions around the topic, women migrants are still more likely to be unemployed or economically inactive than any other group in the European Union labour market. There is a need for a critical examination of laws and regulations that, despite their existence, do not independently foster progress as expected. This calls for a closer look at the effectiveness and impact of existing legal frameworks to ensure they contribute meaningfully to gender equality and the advancement of women in the workforce, particularly in the ICT sector.

Additionally, women entrepreneurs face a disparity in funding compared to their male counterparts and, additionally, are subject to heightened criticism and scrutiny, particularly regarding their ability to sustain solo ventures. The proposed strategic steps encompass a holistic approach, involving legislative changes, cultural shifts, educational reforms, and workplace initiatives.

The discrepancy between legal provisions and the real-world scenario emphasises the importance of policy recommendations stemming from projects dedicated to addressing gender bias in traditionally male-dominated sectors, specially the ICT industry. It underscores the necessity of initiatives that go beyond legal frameworks to enact meaningful change and foster genuine gender equality in practice.

On a local level, regardless of the specific country, common themes emerge. Promoting digital literacy, implementing mentorship programs, and advocating for legislative changes are recurrent strategies. Furthermore, recognizing and addressing internalised misogyny, promoting role models, and addressing unpaid caregiving responsibilities are essential actions for empowering women in the ICT sector.

The proposed strategic steps encompass a holistic approach, involving legislative changes, cultural shifts, educational reforms, and workplace initiatives. These measures contribute collaboratively at both the European Union and local levels to strive towards a more equitable and diverse ICT sector, ensuring that women are not only included but thrive in this dynamic and crucial field. This collective effort is essential for shaping a future where the ICT sector reflects the richness and diversity of talent from all backgrounds.

## Glossary and Abbreviations table

- ICT: Information and Communications Technology. It covers any job position which produces results that will store, retrieve, manipulate, transmit, or receive information electronically in a digital form (e.g., personal computers including smartphones, digital television, email, or robots). (Wikipedia, “Information and Communications Technology”).
- ICT specialists: In accordance with the International Labour Organisation ISCO-083 (International Standard Classification of Occupations 2008) code classification, ICT specialists are workers who have the ability to develop, operate and maintain ICT systems, and for whom ICT constitutes the main part of their job, including but not limited to ICT service managers, ICT professionals, ICT technicians, ICT installers and servicers.
- Direct discrimination. Where one person is treated less favourably than another person is, has been or would be treated in a comparable situation on the grounds of sex.
- Indirect discrimination. Where an apparently neutral provision, criterion or practice would put people of one sex at a particular disadvantage compared to people of another sex (unless that provision, criterion or practice is objectively justified by a legitimate aim, and the means of achieving that aim are appropriate and necessary).
- Harassment. Where unwanted conduct related to the sex of a person occurs with the purpose or effect of violating the dignity of a person, and of creating an intimidating, hostile, degrading, humiliating or offensive environment.
- Sexual harassment. Where any form of unwanted verbal, non-verbal or physical conduct of a sexual nature occurs, with the purpose or effect of violating the dignity of a person,

in particular when creating an intimidating, hostile, degrading, humiliating or offensive environment.

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## Annex - previous project results

All previous project results can be accessed via the following link: <https://www.femminictproject.eu/project-results>. Additionally, we have included the relevant materials in this document.

### Project Result 1: Femin-ICT methodology

**Abstract:** The information provided below is a result of desk and field research that took place in the context of the Erasmus+ funded project Femin-ict. Femin-ICT is a partnership between 7 organisations based in 6 EU countries and aims to bridge that gap by encouraging more women to pursue the sector, upskilling them, providing them with inspiration and role models and promoting their equal participation, representation, and treatment in the ICT\* sector. This research, including dissemination of surveys and conduction of Focus Groups including the Target Group\*\* were held by the entities that are part of the Consortium\*\*\* in their prospective countries and all the information is available in the Google Drive that the Consortium shares. This report aims to analyse and draw conclusions from that research.

#### **Definitions:**

\*ICT: Information and Communications Technology. It covers any job position which produces results that will store, retrieve, manipulate, transmit, or receive information electronically in a digital form (e.g., personal computers including smartphones, digital television, email, or robots).

\*\*Target Group: Women in the ICT sector, women interested in pursuing the ICT sector, employers, labour agencies, academia, municipalities, incubators, the private sector.

\*\*\*Consortium: IMPACT HUB STOCKHOLM AB (Sweden), IKIGAI (Spain), CSI CENTER FOR SOCIAL INNOVATION LTD (Cyprus), Associazione Cò-cò (Italy), Women On Top (Greece), The Square Dot team (Belgium), STIMMULI FOR SOCIAL CHANGE (Greece).

### **Secondary Research:**

The first observation that can be made through the available existing research, is the lack of information on women in the ICT sector specifically. Most of the information acquired from most partners is under the “STEM” umbrella when it comes to women’s lack of participation. Therefore, ICT as a “newer” profession with even fewer female representation is lacking in research on research regarding female participation. Other findings that came from the desk research conducted for the purposes of this project are the following:

**Gender Stereotypes:** STEM fields are often viewed as masculine, and teachers and parents often underestimate girls’ maths abilities starting as early as preschool. In primary education, STEM attitudes do not differ between girls and boys, while girls do not endorse gender stereotypes. Indeed, girls often outperform boys in grades and ICT literacy tasks. Given these differences in attitudes and performance, it is quite interesting that girls expect to be less successful than boys in STEM related careers and that fewer girls than boys are interested in a STEM career at the beginning of high school. (Zacharia Z, et al 2020, Hill C et al, 2010).

**Male-Dominated Cultures:** Because fewer women study and work in STEM, these fields tend to perpetuate inflexible, exclusionary, male-dominated cultures that are not supportive of or attractive to women and minorities (Hill C et al, 2010).

**Fewer Role Models:** girls have fewer role models to inspire their interest in these fields, seeing limited examples of female scientists and engineers in books, media and popular culture (Benderly BL, 2019). There are even fewer role models of Black women in maths and science (Farheen S, 2021).

**Maths Anxiety:** Primary school teachers, who are predominantly women, often have maths anxiety they pass onto girls, and they often grade girls harder for the same work, and assume girls need to work harder to achieve the same level as boys (Wang L, 2020).

Confidence gap: Many girls lose confidence in maths by third grade. Boys, on the other hand, are more likely to say they are strong in maths by 2nd grade, before any performance differences are evident (Cvencek D et al, 2011). This could also lead to women not pursuing those types of careers. In primary education, STEM attitudes do not differ between girls and boys, while girls do not endorse gender stereotypes. Indeed, girls often outperform boys in grades and ICT literacy tasks. Given these differences in attitudes and performance, it is quite interesting that girls expect to be less successful than boys in STEM related careers and that fewer girls than boys are interested in a STEM career at the beginning of high school (Zacharia Z, et al, 2020).

Girls' interest is linked to their environment: negative stereotypes, lack of self esteem and lower self-assessment, lack of mentors, lack of spatial skills hold girls back from pursuing STEM in the future. (Farheen S, 2021, Hill C et al, 2010).

Women in Universities: even women who choose STEM are less satisfied with the academic working environment and are more likely to leave it early than their male counterparts. Due to the lack of women in STEM, women are seen as a representation of their entire gender, which leads to more pressure and further marginalisation by their male peers (Hill C et al, 2010).

Unpaid labour is heavily expected from women (childcare, elderly care, domestic chores) and the pandemic put even more burdens on women which led to many women quitting their jobs or not being able to assume as much responsibility as their male counterparts (Calo X, et al, 2021). Therefore, when a crisis happens women tend to quit their jobs because they are overwhelmed by the other responsibilities falling on their shoulders (Gogoi P, 2020).

### **Primary Research – Surveys and Focus Groups (group interviews)**

The consortium also conducted surveys and focus groups in the countries their entities are based in. The Target Group was divided into two categories: different questions for women already in or interested in the ICT sector and different questions for the stakeholders of the Target Group. The conclusions that were reached for each country are the following:

## Cyprus

According to Cypriot stakeholders, the main barriers women face in the sector are internalised misogyny, lack of role models. One stakeholder who is a partner at a major company said that “men in power want to hire mini versions of them”.

Existing good practices on a national level are very few. There are some actions from non-profit (as well as from private sectors such as universities) that actively promote the inclusion of women in ICT through intensive programs, summer schools, scholarships etc. For instance, there is the “Girls in STEAM” academy trying to not only train but also provide role models for young girls. There are trainings, workshops, conferences for women but it’s more in the vein of entrepreneurship. There are some work places that due to covid offer a more flexible schedule and the ability to work from home, which, for women, studies have shown to be a double edged sword. Yes they might have more flexibility, but wouldn’t they be expected (even passively) to do more unpaid labour and care-giving?

It seems like the main motivation for employers and stakeholders in general to care about this issue, is if it affects how they look from the outside. If they miss out on funding or opportunities because they do not meet some criteria that were set either internally, either from national, regional or EU institutions, that the motivation needed to meet those mandates. A stakeholder that works in academia said that there was a lot of resistance initially when she started to push for more female representation in her sector. The fact that a lot of EU-funded projects require a gender equality plan helped (Horizon). Some people in the private sector and in academia still just want to tick a box. There needs to be stronger governmental support in this area. Also, career counselling needs to change rapidly. The career advice that students of all levels receive do not reflect the current labour market’s needs in Cyprus nor abroad.

When asking for women in the sector’s perspective on this, they blamed mostly issues like gatekeeping and nepotism. The solutions they propose are for systemic change, more visible role models and flexible/remote working networking and mentoring. Women in ICT have also brought up outdated career counselling. “We need to upskill the youth and university students and have degrees available for the current labour market.”



## **Greece**

“The leaky pipeline phenomenon”: women who study STEM in higher education do not necessarily move into a relevant career.

One point that was brought up was that recruitment of women is not problematic, but what is missing is promotion. One of the women professionals who participated pointed out that women either do not move into a career in positions such as software engineering but even though this is their field of study they move into biomedicine or design. “Women professionals take on many tasks and take initiatives to prove their worth and stand out. All the above results in them being efficient” Ultimately though, women do not leave their position nor move to another one. They put a lot of thought into it especially if they have a family. A general observation is that few women study STEM and there are therefore few women in ICT careers.

Three of the participants brought in examples of their own company cultures and attempts to acknowledge the global trend of the recognition of the employees’ need for work-life balance. It was recognized that gender stereotypes hurt both men and women because they create expectations in the work environment based on the gender of the employee. It was suggested by the participants that there is a clear need for companies to establish procedures and regulations so that employees can share incidents of sexism and discrimination and get appropriate responses. Participants brought in examples of discrimination and gender-based stereotypes that prevented their opinion to be equally respected and heard in the male dominated environments. An interesting point that was raised was that women do not easily move to a different position or job because they value stability, that makes it feasible for them to work and take care of their household and children which is something that is mainly expected to be done by them.

It became clear during the focus groups that there is a recognized need for company culture and policies to change, encourage and support women. Participants shared company strategies to encourage women’s involvement and career success. The examples that were brought up were the promotion of women to higher positions to create role models, promotion of work-life balance by offering employees the opportunity to choose the pace of their work as well as in a company’s case hiring of women over 50 years old in ICT positions. One participant shared the strategic plan of her company that was developed throughout numerous years after observing

that there are fewer female ICT graduates moving into ICT careers, to organise small-scale career orientation in public schools to encourage girls to go into ICT careers.

There was a general consensus among the participants that family and role models play a very important role in the perpetuation of behaviours that encourage gender stereotypes both in the professional and personal life. The need for proper education both in the families, by encouraging males to take on family responsibilities as well as (public) school education that enhances STEM skills and does not identify hard skills and ICT skills as male skills was brought up. The need to engage men in these efforts towards fighting sexism and stereotypes that do hurt women more but they also hurt them was mentioned. A need for male role models who are involved in family life was brought up. The power of role models and the need for more women who both teach ICT but also hold leading roles in positions in the ICT that are considered harder and more complicated was emphasised.

## **Belgium**

Concerning the question on equal participation of women in the sector, most answers were “stakeholder pressure” or “CSR profile”.

Main barrier: women find it difficult to develop in ICT initially because they themselves believe they are not capable of doing so. It is internal self-doubts and low self-confidence that are an obstacle to their development. In addition, the attitude of the environment also plays an important role. If their circle does not encourage them to get involved and, on the contrary, influences them negatively, their chances of getting involved are greatly reduced. Finally, the bias of employers, clients and colleagues, i.e. the environment in the workplace, which underestimates and reduces the importance and potential of women in ICT, was also mentioned.

In this respect there are flexible working hours, teleworking, but also more socio-economic provisions such as baby/elderly/disabled care for employees, vouchers to pay for health/education care for employees' families, and the possibility of part-time work. It is extremely important to have and ensure this balance because it leads to a better quality of life and gives work opportunities to more people.

Finally, we asked the question "What kind of support do you need to create gender-responsive environments?" and the answers we received are: more training funding, government support, employee interest with a strong emphasis on the latter.

Women were found to have no particular gaps and weaknesses regarding digital media. However, there is a reluctance on the part of employers to offer leadership positions to women. Technology is used to a very high degree in Belgium, but often gaps are identified in the workplace, by both men and women. As far as technology in the public sector is concerned, efforts are being made to improve it.

## **Sweden**

In Sweden, companies are aware that they need to implement practices for more diversity in the workplace. The decision to do so, generally comes from outside pressure that includes legal pressure, investors, comparison to competition and the sector, and not necessarily from within the organisation. The decision of actively creating initiatives within the organisation to be inclusive, are a way for companies to adjust to current needs/trends and be competitive within the industry. An interest of decision-makers is to keep themselves applicable and ensure that people want to work in their place and keep themselves relevant.

Even though Sweden ranks high in gender equality, there are still gaps. Swedish businesses have acted slow in giving importance to building diverse teams. Women still take more parental leave. More men are in senior positions and usually women hesitate to take on more workload. Hiring managers are actively searching to hire more women, however it takes way more time to recruit women, it is more difficult to find and part of the problem is that they need to recruit fast. Speed is a big problem in the startup scene, because it usually is prioritised over diversity and inclusion.

Societal barriers: there are more challenges in women applying for jobs: if men feel they fulfilled 60% of the requirements, they would apply. Women usually wait until they have 90% of the prerequisites in a role description. It is difficult to retain women as well, because they are usually the minority within departments/floor, they do not feel comfortable, safe by being the only female in the team. In terms of social support, Sweden has all the infrastructure to

encourage more women in the ICT sector, for example childcare is accessible and extensive in terms of hours.

The language used in ads to communicate the job positions and the lack of more diverse role models, is if not the biggest problem. Since the early years of education, women are not encouraged enough to pursue a career in tech. It is seen as a complicated and difficult industry to be in and that it would also be time consuming.

Women tend to choose career paths that are more social i.e. nursing and fashion, with the idea that they will have more time. But further down the line, it is more time consuming and the salaries are usually low. Benefits of salaries and overall benefits of choosing a career in tech are not emphasised enough or communicated in an attractive way that women decide to choose a career in this industry.

The systematic problem includes that the workforce is framed around being part of a group of friends. Men tend to focus on networking, building relationships in the workplace. Women tend to work in isolation, usually because they are the only female in the teams, so men tend to hold "meetings after the meeting". Women tend to have a wider range of focus and ensure that they can deliver results, to prove that they're capable, because they tend to be treated as less able and not to belong.

From academic years, even though women tend to score higher and graduate in larger numbers, men focus on building relations that can later in their careers help them to advance later.

In Sweden, discrimination can be felt in a more subtle way. Women tend to take on more parental workload and motherhood journey can be a setback to advance in the work ladder, even though the childcare support system is good, parenthood does not affect men the same way.

## **Italy**

The importance of structural change was highlighted to get rid of gender stereotypes. It is not just about individual decisions, it is a matter of family and society.

It was also discussed why there is so much pressure and fear of failure in the digital space. Due to the constant evolution, and the “flexibility” that leads to never having time off, it is intimidating.

A change is surely needed: where and with whom should more urgent and timely action be taken?

Opportunities need to be created, to change forms of recruitment and training, to focus on educating young girls and encouraging them into the sector, encouraging start-ups.

## **Spain**

There seems to be progress concerning work-life balance. Some have credited the pandemic as a good start of working from home and workplaces allowing more flexibility.

How confident do you feel around building a gender-responsive environment? A: The presence of women needs to increase and the equality strategies need to be implemented. The presence of female students in STEM is only around 14% and the equality campaigns are important for the future.

Is there something you heard that was discussed/implemented in another country/company and you think that can help increase women’s participation/development or improve their treatment in the sector? A:

Something that is important in the Aragon region of Spain and also in other regions and countries in Europe is having ICT available all over. There is an issue of having access to this in rural places. The pandemic made the role of the family more important and women play an important role. This is why it is important to have political campaigns and access to ICT everywhere.

There is not just one problem in Aragon. Geography is one issue, but we also need more young people with jobs. At the moment there is an issue of young adults who are debating if they should have children at all or if they should wait and have children later in life, which is what is happening now.

In the rural parts, there is an ageing population. In order to be able to offer jobs in ICT, you need a reformation of the countryside. Without political will, it would be impossible.

## **Concluding remarks**

Across the board, women are expected to be the main or only contributors of domestic duties. Therefore, they tend to choose jobs that allow them more time to do that, they take less risks and while they do not offer less in the work despite the extra burden on their shoulders, their contributions are not seen as equally important. Women value stability. Women tend to also get promoted less and therefore climb the ladder slower.

On the other side of the spectrum, there are some region-specific and country specific issues. In Cyprus for instance there is a huge miss-match with what the current labour-market looks like and will look like in the future and what career paths are being pushed.

Flexibility in work hours is deemed as important across the board and also better knowledge on female role models and increase of confidence of women in their own worth and abilities.

One of the main motivators seems to be outside pressure for change: either from stakeholders, or governmental, or EU or just social pressure to consider gender equality in the workplace.

Networking is an important skill for women to build.

# Project Result 2: Toolkit for designing parent-friendly workplaces in the ICT sector: Methodology & tools to enable the design & creation of sustainable & impactful childcare/eldercare workplace facilities & related benefits

Based on literature review, international best practices and FEMIN-ICT partners' expertise.

Created by Lydia Manitsidou, Workplace Architect

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## **Introduction**

### **About FEMIN-ICT**

The gender gap in ICT courses, jobs and functions is a well-documented global phenomenon. FEMIN-ICT aims at fighting stereotypes and other barriers within institutions that can enable or hinder the participation of women and femininities in the ICT sector, equipping the ICT sector with the necessary skills, tools and knowledge to empower women in ICT and better integrate both sexes in all functions and levels of responsibility, as well as assisting all structural, law-making, academic and grass-roots efforts towards closing the gender gap within the ICT sector.

The underlying idea of the project is that by training and supporting the wider ICT ecosystem to embrace gender equality measures and offer spaces, products and services that respond to womens' and femininities' needs, then the ICT sector will be able to attract/absorb/retain/empower more of them and thus become more diversified, equitable and inclusive.

To that end, FEMIN-ICT will offer a unique training and support programme, equipping, on the one hand, ICT Businesses, ICT business ecosystem and public authorities with those skills and tools, to empower women in the ICT sector and integrate the gender dimension in all their practices and, on the other hand, women who are either employed in the ICT sector, or already running ICT businesses, or even unemployed but interested in pursuing an ICT career to initiate or advance their careers in the digital economy.

Through the project's results, we aim to achieve the following objectives:



ICT businesses as existing and prospective employers will be supported and trained towards fostering a more inclusive working environment.

Business support ecosystems will be trained and better prepared to provide more gender-responsive services, adopt gender communication and outreach strategies and support women ICT entrepreneurs more effectively, rebalancing their gender gap

Academic institutions, municipalities and prefectures will be trained and better prepared to design and implement more women-friendly empowerment initiatives and structures, such as upskilling programs, networking activities, co-working spaces and hubs, and community-led ICT projects.

Women will be empowered to pursue careers in ICT and supported to continue their work and have productive and rewarding careers in parallel to those experienced by their male counterparts.

FEMIN-ICT is funded by the Erasmus+ Program of the European Union.

## **Scope and content of the toolkit**

### **Who is the FEMIN-ICT methodology for?**

This tool aims to address the need and equity, diversity and inclusion priorities of:

Employers (i.e. enterprises, businesses, etc.) in the ICT sector, interested in diversifying their ICT staff and wishing to integrate the principles of gender mainstreaming in their everyday work.

Business incubators supporting new and small tech start-ups and wishing to endorse gender equality mandates in their practices.

Academic institutions and local governmental agents (i.e. municipalities, prefectures, etc.) who aim to support gender equality in the ICT field and wish to incorporate relevant activities in their spectrum of operations.

Through this methodological tool we aim to empower each and every tech-related ecosystem to begin their journey towards creating more gender-responsive policies, practices and operations to support a more and more equitable ICT field in the process.

We are looking forward to receiving your impressions, comments and adaptations of this material in order to make it even more effective and inclusive for all.

### **Who will benefit?**

Employees, incubees, students and citizens, freelancers of the ICT sector with caring responsibilities.

### **Why a toolkit for parent-friendly workplaces?**

Working parents are struggling in their everyday effort to efficiently reconcile their professional/educational and private/family lives. Especially professionals, entrepreneurs and students in the ICT sector have to deal with demanding jobs in terms of schedules, deadlines, working hours. They may work remotely, in the office or on a hybrid mode, nevertheless they usually need to accomplish a lot of tasks, often under tight deadlines, communicate with many different colleagues, providers, clients and other stakeholders on a regular basis and often do independent work that requires concentration and full attention to detail.

One of many surveys that refer to the challenges and complexity especially for working parents, published in the International Journal of Human Resources Studies, indicated five main areas of concern: work-life conflict, stereotyping, exhaustion, changing work schedule, and career growth opportunities. In the wake of COVID-19, conditions for working, studying and entrepreneurial parents have become even more complicated.

This toolkit is designed to help companies, organisations, incubators and academic institutions address this complex and multilayered issue by providing practical ideas and solutions.

### **What are the actual issues?**

No access to childcare for babies and young children

School schedules that do not match parents' work schedules, both because of a different daily timing, but also because of a mismatch between vacation time for children and adults

Unexpected professional or childcare needs

Childcare facilitation from the organisation's/employer's part would lead to better work and life quality. Less stress and better time management for working and learning parents would help with productivity and absenteeism issues. Companies and other institutions that offer childcare support generally enjoy higher satisfaction and loyalty from the part of their employees and beneficiaries and thus attract, motivate and retain better talent in their workforce and stakeholders base.

We now live in the transition period between the pandemic and a new workplace reality. Many companies and academic institutions need to deal with how their population will get back to the office and how they can best support remote working/learning or even an optimised combination of both. This is a great opportunity for organisations to design and implement strategies that support and facilitate parents.

There are various strategies and policies that may address this issue in various scales and modes.

In this toolkit we will present options that support the practical childcare needs for working parents in the ICT sector in two categories:

- options that offer childcare not related to the physical workplace/learning space

- options that are provided in the physical workplace/learning space

Both small scale and big scale options will be presented, some of them are flexible.

Since there are multiple regulations and differences between countries, this toolkit presents a general approach that must be further customised to fit the needs and circumstances of each case or company.

Apart from various practical ways to facilitate parents in the ICT sector, users can also find here a guide designed to help with decision-making and with selecting the most appropriate solutions, according to the organisation's size, demographics and goals.

How to use

In this toolkit we focus on parents and specifically on strategies aiming to facilitate childcare in the workplace or during learning and work. The issue is complicated and multi dimensional. Decision-making around the most appropriate strategies, needs to be a process based on a careful needs assessment. The size and demographics of the company or institution, its building capacity, feasibility conditions, budget and expected impact are the key factors to guide decisions.

Options for all scales will be presented in the toolkit -some are simple, some are more demanding and some are flexible. In order to focus on the most appropriate ones for each case we have designed a simple guide with indicators for the key factors which imply the size, scale and other characteristics relatively. In the following paragraphs the above key features will be analysed and categorised. Later in the toolkit each proposal will be accredited with indicators to help with a first level assessment.

### **Demographics**

For this toolkit, when we refer to the demographics of an organisation, we focus on the number of employees/beneficiaries and their specific characteristics (age, gender, potential or existing parental responsibilities, number of children and children's ages). We also encourage organisations to go deeper and research the childcare needs/preferences of their employees or students, based on their location and, as needed, on their distance from office buildings. The table below can be used to determine an organisation's scale according to demographics. We use the overall number of beneficiaries/employees or, for site-specific proposals, the number of people per company location.

#### DEMOGRAPHICS

D1

VERY SMALL < 10 employees

D2

SMALL < 50 employees

D3

MEDIUM < 250 employees

D4

LARGE > 250 employees

### **Building capacity / Space availability**

Usually demographics and building capacity are interconnected. There are different types of premises which relate to the size, type and industry. Offices or learning spaces may use a floor or part of a building, an independent building unit or a campus. This toolkit includes proposals for all the types of premises described above. For feasibility assessment reasons, here we focus mostly on the size of available spaces which could be used or transformed as childcare facilities.

#### SPACE AVAILABILITY

S1

SMALL < 20M2

S2

MEDIUM < 100 M2

S3

LARGE > 200 M2

SF

FLEXIBLE

### **Budget**

Budget scaling relates to one-off or periodical costs as well as cost per beneficiary or per event / occasion. Construction cost, procurement cost or fees and services costs vary from country to country. For classification and decision-making purposes, the table below refers to Low, Medium, and High budget, i.e. Low = under 5.000 € and High = more than 50.000€ for one-off costs.

#### BUDGET

LOW L

MEDIUM

HIGH

FLEXIBLE

B1 - ONCE

B1 L

B1 M

B1 H

B1 F

B12 - MONTHLY

B12 L

B12 M

B12 H

B12 F

BPE - PER EVENT OR OCCASION

BPE L

BPE M

BPE H

BPE F

BPB - PER BENEFICIARY

BPB L

BPB M

BPB H

BPB F

### **Impact factor**

All the above key features mainly refer to feasibility. Impact presents the actual reason for investing in childcare benefits for employees and their families. Focused research may be conducted to understand the potential of each applied strategy. In this chapter we try to facilitate first level decision-making. For this reason the following table will help you get a general idea of the number of people and the needs that each proposal can cater to.

IMPACT

FACTOR

PARENTS CHILDREN/BABIES < 2,5 YR

PC B

PARENTS CHILDREN/TODDLERS < 2,5 -5 YR

PC T

PARENTS CHILDREN 6-12

PC C

EMPLOYEES

E

ONLY BREASTFEEDING MOTHERS

M B

EVERY DAY - ED

PC B / ED

PC T / ED

PC / ED

E / ED

M B / ED

SPECIFIC DAYS

SD

PC B / SD

PC T / SD

PC / SD

E / SD

OCCASIONALLY

O

PC B / O

PC T / O

PC / O

E / O

### **Our guide**

After each proposal presented in this toolkit, you will find a table with all the applicable indicators. When you go looking for specific types of solutions, you can refer to the indicators that reflect those. Or you can identify which proposals can be further examined or excluded from your strategy. More detailed guidance is included after the proposals chapter.

example

DEMOGRAPHICS

D1, D2

BUILDING CAPACITY

S1, S2

BUDGET

B1 L, BF

IMPACT FACTOR

PC B / SD

### **Proposed strategies / benefits / implementation methodologies**

There are multiple ways for companies and other institutions to support their employees and beneficiaries in their work-life balance challenges. Culture and values should be the starting point. A culture that promotes flexibility, trust and understanding is a prerequisite. This handbook will not refer to values and culture, as it is taken for granted that organisations who are going to use it have already taken the initial steps and are now looking for practical ways to assist their population. Flexible schedules and time management, flexibility and remote working are some general strategies that may facilitate parents, but are not included in this toolkit. You can find more information about these in the general FEMIN-ICT methodology, under the Work/life balance chapter.



Here we focus on parents and especially on strategies related to facilitating childcare in the workplace or during work and learning.

We will begin by identifying two distinct categories of supporting strategies;

1. Childcare benefits and services not related to the physical workplace or learning space.
2. Spatial interventions related to the physical space, using company premises for flexible or dedicated childcare.

A general assumption that we take for granted in this toolkit is that work/learning and childcare cannot be conducted simultaneously by the same person in the same space. Working or studying from home with children cannot happen unless there is an isolated space and a person who takes care of children independently. Of course there are cases where work/studying and childcare may be combined, depending on the type of work, the children's ages and the number of children in the family, but this cannot become an everyday long term practice for adults who also want to develop professionally in an ever evolving workplace.

### **non-spatial benefits and services**

#### **collaboration with daycare centres**

A basic and easy to offer benefit for parents is to subsidise their child's (or children's) place in a daycare centre. There are multiple criteria that parents use when trying to choose a daycare centre. Quality of services and location are key ones. Availability, cost and accessibility also matter. If work/study and childcare are in the same destination or, even better, in the same area, time management optimization for parents may be a great plus. If quality and cost are covered, it forms an ideal condition.

Considering the organisation's location and neighbourhood, offering a standard collaboration with daycare centres in the area may make the choice for parents easier. Organisations can agree with neighbouring daycare centres to fully or partially subsidised places for their employees'/students' children. The collaboration would be mutually beneficial both for the organisation and the daycare centre, since the centre will have a standard stream of children and the organisation may achieve better cost agreements.

## **How to plan**

Research to identify needs / how many parents would benefit

Research to identify service providers in the area / rating potential providers in collaboration with a parents' committee or ERG.

Estimation of cost and budgeting / according to the number of beneficiaries

Business plan

Regulation

## DEMOGRAPHICS

D1, D2, D3, D4

for all companies

## BUILDING CAPACITY

outsourcing services / no need for onsite spaces

## BUDGET

BPB F

very flexible budget

## IMPACT FACTOR

PC B / ED , PC T / ED

services that can apply to all parents with children under 5 yrs everyday

collaboration with home-based providers

An alternative for daycare centres is childcare at home with childcare professionals, baby-sitters, nannies, tutors or teachers, depending on the children's age and needs.

Since choosing a baby-sitter / nanny / tutor is a family matter, what an organisation may offer as a benefit is a collaboration with baby-sitting / childcare service providers, ensuring greater reliability in childcare or backup childcare.

There are companies and platforms that offer access to a network of professionals and guarantee quality, professionalism and availability. There are also subscription-based babysitting services which give access to a pool of expertly pre-screened nannies for at-home babysitting appointments and can even guarantee a reliable last minute nanny for high-quality temporary back-up care.

There are many choices on how and to what extent to provide this kind of benefit.

It may be in terms of standard collaboration with a network of professionals or on an on-demand basis collaboration. Both research on what the local market has to offer in this area and research on beneficiaries' needs is essential to conclude on the best option.

### **How to plan**

Research to identify needs / how many parents would use it on a daily basis or on demand / use data for absenteeism and feedback from parents

Research to identify service providers in the area / include parents on the process

Estimation of cost and budgeting

Business plan

Regulation

### DEMOGRAPHICS

D1, D2, D3, D4

for all companies

### BUILDING CAPACITY

outsourcing services / no need for onsite spaces

### BUDGET

BPB F, BPE F

very flexible budget

### IMPACT FACTOR

PC B / ED, PC T / ED, PC / ED

PC B / SD, PC T / SD, PC / SD

PC B / O, PC T / O, PC / O

services that can apply to all parents range everyday and occasionally, backup care, flexible working

### **What about eldercare?**

Eldercare is another everyday challenge for a considerable part of the population. According to employees' identified needs, an organisation could expand its strategy to offering eldercare benefits, by collaborating with platforms and service providers in this field.

### **Collaboration with co-working spaces with on-site childcare**

Coworking spaces offer flexible working stations in most cities and serve as an alternative office-space for employees and companies. They provide different scales and types of services in a domain which continuously evolves and adapts to current conditions and professionals' or companies' needs. Subsidised spots in coworking centres may be an everyday facility provided by some companies or an on-demand service for specific occasions or a subsidiary for remote working.

Coworking centres that offer childcare are an option for parents who also practise remote working/studying. Either on a daily basis or on an on demand basis coworking centres with childcare may be a life-saving option for remote working/studying parents. They can be combined with at-home childcare by family members or nannies or with after school/daycare centre working hours.

The truth is that there are not yet many coworking centres offering childcare globally. At the same time the need and demand for childcare rises when hybrid working models are preferred. As a result, more coworking spaces are expected to make an effort to include childcare for the growing working parents target market.

Organisations may offer standard subscriptions or flexible collaborations with coworking centres for their employees after evaluating needs, cost and impact. Municipalities and prefectures could plan for building such community hubs as a service to all workers and learners with caring responsibilities.

## **How to plan**

Research to identify needs

Research to identify service providers in the area.

Estimation of cost and budgeting

Business plan

### DEMOGRAPHICS

D1, D2, D3, D4

for all companies

### BUILDING CAPACITY

outsourcing services / no need for onsite spaces

### BUDGET

BPB F, BPE F

very flexible budget

### IMPACT FACTOR

PC B / ED, PC T / ED, PC / ED

PC B / SD, PC T / SD, PC / SD

PC B / O, PC T / O, PC / O

services that can apply to all needs everyday and occasionally, backup care, flexible working

## **Note**

All the above child care/eldercare options -collaborations with daycare centres/study centres, platforms and services for childcare professionals and coworking centres including childcare-can -and sometimes need to- be combined to offer a holistic plan for a company, incubator or learning institution to address the childcare/eldercare challenges of its beneficiaries and employees. The best combination will come out of carefully researching options and needs and should be flexible to adapt, over time, to changing organisational demographics.

When collaborations are established it is important that all information is well organised and accessible for the employees/students/beneficiaries to use. A family consultant can also help them choose the more appropriate solutions for their circumstances.

### **space-related structures and facilities**

In this chapter we refer to facilities that are provided in the physical workplace or learning space. Specific spaces which are dedicated or flexible to serve childcare and/or parent care activities.

We can identify two categories according to scale and requirements and an additional one which is facilities which are nice to have for all beneficiaries, but would be even more appreciated by parents.

Small scale interventions are easy to apply and can really make a difference for those who may need it. They can meet occasional needs and do not need specific professional staff to support it.

Large scale interventions that are more complicated to implement, are more demanding in terms of space, cost and policies, but have an important impact factor for those who use it. Professionals are needed for implementation and operation.

Additional facilities that support wellbeing for everybody.

In order to choose which option suits best for an organisation, research to identify needs and expected impact is essential.

### **Small scale interventions**

Small scale interventions refer to limited space, budget and complexity requirements.

Spaces that can be reused or transformed to family friendly spaces, with minimum requirements and infrastructure and some extra equipment. The following proposals include spaces that are either dedicated to parents - children use, or multifunctional meaning that they can be occasionally used for special occasions.

### **Special occasions**

sudden illness/unexpected event of the person who is responsible for childcare  
school closes unexpectedly or school holiday that is not an official bank holiday

We use a template with standards for every proposed space so as to facilitate understanding and decision - making.

### **Template for small scale interventions**

This template includes and categorises all the information related to the proposed interventions. The type of information is presented and explained on the generic template and the info for every type of space follows.

definition of use

who needs it / who will take advantage of it / in which occasions

surface

minimum and maximum space needed

position

where it should be located according to use and specifications

space requirements /spatial characteristics / functionality

spatial characteristics like natural lighting, ventilation, access, privacy, etc

infrastructure

needed infrastructure in terms of electromechanical installations and provisions

equipment basic

minimum equipment which is essential for the specific use

equipment additional

additional equipment which will make the use of space better / nice to have equipment

estimation of cost

cost cannot be estimated accurately because of differences between countries in terms of construction and procurement costs and multiple choices

who do you need to design and construct

technical staff / decision and policy makers / stakeholders / experts that are needed to make this implementation happen

next steps

step by step guidance for implementation

pros

what are the advantages and impact

cons

what are the challenges that may occur

supporting policies

policies and regulations that may be essential to reassure health, safety, feasibility and impact

number of spaces

advice on how many implementations would be needed

### **Supporting mothers in the workplace through breastfeeding facilities**

One of the most effective and practical support structures that organisations can easily provide is lactation rooms. These are spaces where a mother can express and preserve breast milk to feed her baby later. Breastfeeding mothers who return to their work or studies often need to express milk many times during the day, for a period of their choosing. Since this is a basic need for many mothers, support from companies should be obligatory, which is the case in many countries and/or companies. There are laws and policies that provide lactation breaks and define lactation rooms requirements.

The spaces that are meant to cover breastfeeding needs are called lactation rooms.

They are easy to create and operate. They offer more than just practical support for new mothers. They are proof that an organisation cares about making parents feel included and comfortable in public spaces, after bringing home a new family member. They embrace parenthood.



definition of use

nursing mothers / future nursing mothers

surface

6 - 15 m<sup>2</sup>

position

Ideally, a lactation space is close to where an employee works and no farther than a 5-minute walk. Spaces should be evenly distributed within large buildings, as well as across a large campus, in easily accessible locations. Limiting a breastfeeding mother's travel time minimises the overall amount of break time she will need to pump. centralised locations also make it possible for the greatest number of employees to access the space.

easy access to water supply and drainage would be ideal, which would be an extra condition to identify a suitable space.

space requirements /spatial characteristics / functionality

The actual function of the space is to accommodate a sitting person using a breast pump on a table. There should be a place to put personal things, a refrigerator to conserve expressed milk, a sink to wash hands and breast pump parts, a microwave to disinfect breast pump parts. Visual and sound privacy is essential. Natural lighting, ventilation and climatisation are obligatory.

Due to hygiene and safety matters a bathroom cannot be used.

infrastructure

electrical outlet

water supply and drainage

ventilation and climatisation

equipment basic

a chair

a flat surface such as a table, desk, or shelf for the employee's breast pump and supplies

an electrical outlet for the mother's breast pump

equipment additional

a hospital-grade, double electric, multi-user breast pump

a sink for washing hands and pump parts

a small refrigerator for storing milk

a microwave so mothers can keep their equipment clean

soft lighting

an ottoman or footstool

framed photos or posters, a place for mothers to hang photos of their infants, to help with relaxation and milk flow

a locker or hooks for a woman's belongings (helpful for employees who do not have their own office space or cubicle)

a space where moms can store their pumps

a full-length mirror for a woman to readjust clothing after pumping

cleaning supplies to keep the space clean

a white noise machine

a phone charging station

a tea or coffee machine for mothers to use

reading material, such as parenting books or magazines

estimation of cost

create a list of equipment to estimate procurement cost -if space modifications or additions are needed consult a technician

who do you need to design and construct

technical staff or facility management to check infrastructure and space availability / HR to identify the needs / designer (or it can be a team building activity)

next steps

identify needs (how many women, how many spaces)

identify possible spaces that meet the requirements

design phase / could ask help from parents or even all employees

construction phase

identify, buy and install equipment

spread the news

pros

Breastfeeding support is crucial as research has found that returning to work without adequate support mechanisms can hamper optimal breastfeeding practices. Breastfeeding support is important for children's health and development, for mothers and for society as a whole. The provision of breastfeeding rooms, nursing breaks and an enabling breastfeeding environment and culture are low-cost interventions that can contribute to improve job productivity and employee retention.

cons

None. The only challenge is to identify the right space for this use and take care for privacy.

supporting policies

provide reasonable (paid) break time to express milk

number of spaces

organisations need to consider how many women of reproductive age (usually 18 to 50 years of age) are employed, the number and size of buildings, and the beneficiaries' schedules and circumstances. A general guideline is to provide at least one permanent milk expression space for every 50 to 100 women employed by the organisation or using its premises, and to adjust as population needs increase.

DEMOGRAPHICS

D1, D2, D3, D4

for all companies

BUILDING CAPACITY

S1

limited space is needed

BUDGET

B1 L, B1 F

low budget / flexible

IMPACT FACTOR

MB / ED

for breastfeeding mothers it is basic and covers a many times during a day necessity

**Note**

If it is not possible to construct a lactation room or rooms a lactation pod can be used.

Lactation pods are ready-made pods that support the milk expression activity for breastfeeding mothers. They are small and windowless, but in cases of lack of space they offer a solution.

**Supporting children's presence in the workplace**

Unexpected occasions that disrupt everyday routine can occur for everybody. For working parents, unexpected childcare failures may be really stressful and most possibly lead to absenteeism. If companies and organisations can provide an option for parents to temporarily bring their babies or children to the office, in these difficult to arrange last minute situations, it would help both parents and companies to eliminate occasional workflow disruption and absenteeism.

**What kind of unexpected occasions?**

The person who is in charge of childcare may be sick or have to deal with something unexpected. This could happen to anyone, be it a professional or a family member.

A daycare centre may be closed for a short period due to sickness or some other reason.

Official or unofficial bank holidays when daycare centres or schools are closed but the office is not.

Days when schools and daycare centres close earlier than usual.

Christmas, Easter and/or summer holidays, spring and winter breaks that do not coincide with parents' leave and days-off.

These occasions are normally handled either by the parents taking a day off or by family members or friends chipping in, if they are available. In any case they are uncomfortable and stressful moments which would be made easier if parents could bring the children to the office/learning space for a limited amount of time/days. For that there need to be appropriate conditions for children, with spaces that can accommodate children's activities.

Here we will present some types of spaces which could allow and facilitate the presence of children in work or learning spaces, for a short period of time, considering the age of the child and type of engagement of the parent.

### **Note**

Not all workplaces/learning spaces can accommodate the presence of children. For example, children are not allowed to visit industrial sites or chemical industry installations due to health and safety dangers.

### **Parent and child dedicated offices**

These are offices that can be used by a parent, along with their child, in the workplace or learning environment. It has already been mentioned above that work/learning and childcare cannot happen simultaneously in the same space by the same person, at least for young children who cannot be left unattended and are most of the time in need of care. The “offices for parents and children” solution suggested here, though, can be used for limited periods of time to help with some unexpected event. The use of this type of offices cannot, in most cases, be an everyday practice.

### **Different age groups - different needs**

Babies up to 12 months can stay with their parents in an office using a stroller, a recliner, a baby-gym or other equipment that allows for the baby to sleep.

Toddlers and preschoolers can play by themselves for some time if they have the space, the toys and the presence of their parents in the same space.

Children 6 to 12 years old can play, read, do their homework, watch a movie or play with phones or tablets.

To create offices for parents and children, it is essential to invest in the space and the equipment that will serve both the parent and their children.

Here we have identified three different parent & child office types which, depending on the space available, can be either combined or form flexible/distinct spaces for children of different age groups.

Parent & child offices...

...for babies

...for toddlers

...for children

definition of use

parents that cannot leave their children in another childcare option due to sudden or unexpected changes

3 case studies

parents with babies up to 12 - 18 months

parents with children 18 months - 5 years

parents with children 6-12 years

surface

closed (meaning not an open or semi-open) office space 15-30m<sup>2</sup>

position

any office can be used if it is closed and has enough space

space requirements / spatial characteristics / functionality

all requirements and comfort conditions that a workspace/learning space is subject to; natural lighting and ventilation, air-conditioning, soundproofing. Visual privacy would be nice to have especially for babies, but is not obligatory

infrastructure

nothing more than what an office space already has.

Electrical outlets must be protected with child safety protection.

If there are glass walls or windows a protection handle is needed.

No spare parts and small objects, sharp or hard elements

equipment basic

for the parent

what a conventional office space already has

desk and chair

electrical and data outlet to plug and play for laptop / or pc with access to company's systems

for a baby

baby cot

feeding/playing high chair

changing table / mat

toddlers

children's table

high chair

children

extra desk with chair

pc or tablet

equipment additional

for the parent

cupboard for storing things

babies

recliner

baby play foam mat

pillows

box with baby toys

toddlers

reading chair or pouf or small sofa

floor mat and pillows

box with drawing materials

games

books

children

reading chair or pouf or small sofa

floor mat and pillows

books, comics, games

gaming console

estimation of cost

this is a low-cost intervention

create a list of equipment to estimate procurement cost

if space modifications or additions are needed consult a technician

who do you need to design and construct

Technical staff or Facility Management or Space Management team to check infrastructure and space availability /

HR to identify the needs /

Designer or it can be a team building activity /

Procurement team

Next steps

identify needs (how many parents, how many spaces)

identify possible spaces that meet the requirements

design phase / could ask help from parents

construction / implementation phase



identify, buy and install equipment

spread the news

welcome parents and children when the occasion occurs

Pros

Easy application /

Not specific requirements /

Mostly extra equipment is needed /

Low cost intervention /

Flexible

Cons

Laws that do not allow the presence of children in the workplace /

Disruption for the parent /

These offices do not address the issue of sudden lack of childcare without disrupting workflow and productivity.

They are a temporary solution for a short period.

The presence of the parent is obligatory all the time / The parent cannot easily participate in physical meetings or work in full productivity mode

Supporting policies

Policies that ensure children safety in the workplace.

Regulations about when and in which conditions children can be in the workplace.

Cleaning routines should be adjusted.

Number of spaces

In order to define how many parent/child offices to construct, a research with the help of HR should be realized, focusing on how many employees are parents with children and in which age-groups.

Create a pilot-project parent and child office and invite parents to use it.

Ask the parents' opinion if they would find these offices useful and their insights of when and how often they would need it.

Since these offices can be used as regular offices too, they do not reserve workspace. They are easy to do or undo according to the needs of people.

## **Note**

All three age-group kinds of parent/child offices can be combined in the same office providing equipment for each age group as presented above with some adjustments. Provide some storage boxes to accommodate each group's games and material.

### DEMOGRAPHICS

D1, D2, D3, D4

for all companies

### BUILDING CAPACITY

S1

small space or existing space

### BUDGET

B1 L, B1 F

low budget / flexible

### IMPACT FACTOR

PC B / O, PC T / O, PC / O

occasional use due to unexpected events / but can be a great last minute alternative and will reduce frustration and absenteeism

### **Flexible spaces that can accommodate children activities**

School age children can spend some time unattended reading, doing homework, playing, communicating with their peers, watching movies or playing games in an appropriate environment where health and safety is ensured and there is no danger or risk posed for them.

We suggest flexible spaces that can accommodate children for some time while their parents are engaged in their work/learning and children are not in school.

Meeting rooms or offices can be used for this reason with some slight improvements and/or adjustments.

definition of use

Children in the age over 6 years old that do not have access to another childcare option due to sudden or unexpected changes / Children that return from school (school time is shorter than work hours) after school / or during school holidays

surface

closed (meaning not an open or semi-open) office or meeting space 12-30m<sup>2</sup>, children of the same or close ages can co-exist, play or study together

position

workplace / any office or meeting room can be used if it is closed and has enough space

space requirements / spatial characteristics / functionality

all requirements and comfort conditions that a workspace is subject to; natural lighting and ventilation, air-conditioning, soundproofing. In these cases visual privacy is not suggested. For supervision and control reasons it is suggested to use spaces with transparent division walls which offer visual contact.

infrastructure

nothing more than what an office or meeting space already has.

Electrical outlets must be protected with child safety protection.

If there are glass walls or windows a protection handle is needed.

No spare parts and no small or sharp objects.

equipment basic

what a conventional office / meeting space already has

desk / meeting table and chair

electrical and data outlet to plug and play for laptop

internet access with parental control software for existing computers

equipment additional

cupboard for storing things

relax / lounge furniture  
reading chair or pouf or sofa  
floor mat or carpet and pillows  
library with books, comics, games  
games  
books  
tv  
gaming console

estimation of cost

This is a low-cost intervention

Cost cannot be estimated accurately because of differences between countries in terms of equipment costs and multiple choices

Create a list of equipment to estimate procurement cost,

if space modifications or additions are needed consult a technician

who do you need to design and construct

Technical staff or Facility Management or Space Management team to check infrastructure and space availability /

HR to identify the needs /

Designer or it can be a team building activity / Procurement team

Next steps

identify needs (how many parents would care for such a space for their children)

identify possible spaces that meet the requirements

design phase / could ask help from parents and children to create it

construction / implementation phase

identify, buy and install equipment

spread the news

welcome children when the occasion occurs

Pros

Easy application /

No specific requirements /

Almost no extra equipment is needed /

Low cost intervention /

Flexible space which is available for other uses when free.

Workplace community building / families meet

Cons

Laws that do not allow the presence of children in the workplace /

Disruption for the parent /

They are a temporary solution for a short period.

The parents should take the responsibility for their children / they cannot be in a fully productive mode or participate in physical meetings out of the office at that time.

Supporting policies

Policies that ensure children safety in the workplace.

Regulations about when and in which conditions children can be in the workplace.

Rulebook for the use of space.

Cleaning routines should be adjusted.

Number of spaces

In order to define how many flexible children friendly meeting areas to construct the best approach is to construct a pilot space and test it.

Conduct a research with the help of HR on how many employees are parents with children of the target age group who would find such facilities useful.

Ask the parents to provide insights of when and how often their children would need it.

Since these study/play/meeting rooms can be used as regular meeting rooms they do not reserve workspace.

They are easy to do or undo according to the needs of people.

DEMOGRAPHICS

D1, D2, D3, D4

for all companies

BUILDING CAPACITY

S1

small space or existing space

BUDGET

B1 L, B1 F

low budget / flexible

IMPACT FACTOR

PC / ED, PC / SD, PC / O

for parents that need to work more than a school day's end time it may be an everyday solution, otherwise occasional use due to programmed or unexpected events / it can be a great last minute alternative and will reduce frustration and absenteeism

### **Note**

If there is standard use of these children-friendly rooms, group activities could be organized. Another idea is for a teacher or other childcare professional to be in charge to support children's study or play if there is regular demand and parents agree and organize.

Any desk can serve as a study area for children aged 8-12 years old. The suggestion is to show extra effort to support parents. It is easy to supplement some offices or meeting rooms with children focused equipment / children library / pc / tv

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### **Multifunctional spaces for occasional school free days**

In companies or organisations with large scale premises or campuses, which may include big scale auditoriums or multifunctional spaces for big events or other kinds of large spaces like foyers or open spaces outdoors, some organised children events could happen.

These kinds of workplace spaces are usually flexible in terms of use, availability or equipment and can be easily and temporarily transformed to children activities areas. Organised events can be held for children to spend their day in their parents' workplace/learning space on special

occasions when schools are closed (summer holidays, christmas holidays, autumn and spring breaks or other official school holidays).

These events can be arranged and hosted by professionals, contracted by the employer.

We can provide some general guidance to identify and adjust spaces that can be used for these activities..

definition of use

Children from different age groups on scheduled days that are school holidays but not bank holidays

surface

100 - 400 m<sup>2</sup>

position

auditoriums, multifunctional spaces, foyer, outdoor spaces, according to climate conditions

space requirements /spatial characteristics / functionality

No specific requirements / activities will adjust to available spaces accordingly

infrastructure

Nothing special

For activities with many children a sound system would be helpful.

If there is a projection screen or wall could be used.

In any case activities will adjust to available infrastructure.

equipment basic

As above

equipment additional

All additional equipment will be provided by the event organisers

estimation of cost

No cost for space adjustment / cost will be estimated according to the events or activities

who do you need to design and construct

No construction needs

HR to identify the needs; how many children / which specific days or periods

Event organiser

Next steps

identify appropriate dates

Identify how many children would participate with the help of HR

identify possible spaces that meet the requirements / according to the number of children

discuss and organise with the event planner

schedule the activity

spread the news

welcome children in the day of the event

Pros

These activities can be organised on special days when schools are officially closed and provide a solution for parents who will not have to deal with the issue of childcare these days. They just take their children with them and the children participate in organised activities which could be educational or recreational or related to the thematic focus of the company or institution.

The cost is flexible, depending on the number of children.

Reduces stress and absenteeism.

Cons

Laws that do not allow the presence of children in the workplace

Outsourced activity which requires experts

Supporting policies

Policies that ensure children safety in the workplace.

Regulations about when and in which conditions children can be in the workplace.

Number of spaces / times

The first event can be a pilot for future events. It can become a standard activity for school holidays.



## DEMOGRAPHICS

D3, D4

only for big companies

## BUILDING CAPACITY

S3, S4

needs big space / flexible for big companies

## BUDGET

B1 M, B1 F

## IMPACT FACTOR

PC B/ SD, PC T/ SD, PC / SD

on specific days or periods it can offer a standard solution for parents and become a custom practise which will support community building

### **Big scale interventions**

Workplace/learning space daycare is typically an on-site facility that provides childcare. The facility is limited by age. The services are usually available at a fee that is subsidised by the employer/institution, although some companies/organisations may offer this benefit for free. As with off-site care providers, these programs must be licensed, insured, staffed with trained educators and assistants, and provide a safe environment for groups of children.

Creating a daycare or a children activities centre is considered to be a large-scale intervention. It is also complicated to implement and demanding in terms of space, cost and policies.

A daycare / children activity centre in the workplace is an official centre with extra complexity that needs to co-exist with existing offices/learning spaces and be relatively independent at the same time.

Experts and professionals are needed for its implementation and successful operation. Bureaucracy and processes required for its construction can be demanding. Set-up and operational costs need a detailed business plan to estimate impact and return on investment.

On the other hand, including childcare facilities in the workplace or an academic institution reflects a more inclusive culture, which showcases the care for working/learning parents and

their needs. On a decision-making level, creating onsite daycare centres makes sense for big companies with efficient premises.

Here we identify two different types of onsite children centres:

daycare centre for children up to 5 years - old / babies 6 months - 2,5 years and preschoolers.  
2,5-5 years

after school activities / study centre for school age children from 5 to 12 years old

The decision to create a daycare centre is dependent on multiple factors and must take into consideration at least the following parameters:

size and type of premises and availability of spaces, which are related to company size and number of employees

space and safety requirements (feasibility study)

cost and impact

A business case scenario must be created, answering the following questions:

How many children per age group - employees (parents) will use the facilities, taking into consideration future needs?

What are the minimum spatial requirements for the expected daycare center capacity and how can those be met?

What is the initial implementation cost? What will the operational cost be?

What will the impact of running a daycare center be, compared to other benefits or options?

What are the optimization and balancing alternatives?

Here we will present some basic features and parameters to help with decision-making on a first-level approach. The next step is to consult with local professionals, architects, constructors, and daycare professionals to ensure feasibility and create a more detailed scope and business plan.

## **Regulations and requirements**

Minimum Requirements are subject to local regulations and certifications.

Building an onsite daycare centre presents the same requirements as building an independent daycare centre in terms of building regulations, fire protection laws and technical specifications.

There is the additional complexity of the facility co-existing with the workplace/learning space.

The first step is to check if the use of a daycare centre is permitted in the area, zone or specific industry. Not all workplaces/institutions are allowed to have childcare facilities.

For example, daycare facilities are not allowed in industrial zones or in distances less than 300m from an industrial area, industrial zone or industrial premises.

Every daycare/ activities centre should have an operational licence in accordance with local laws and regulations which refer to spatial specifications, operational requirements and proof of adequate and expert staff.

## **Spatial specifications list**

The licensed use of space must be in accordance with local laws. In Greece, for example, for daycare centres and facilities the official building use must be in the category of Health and Social Services, which means that the building where the daycare centre operates should meet the conditions and prerequisites for this type of use. If this is not the case, modifications and adjustments may be needed, as well as a special licence to proceed. In these cases, the advice of an expert on the topic is essential.

You can check some obligatory spatial features as follows:

The daycare/children activities centre should have an independent entrance. This cannot be the same entrance that is used by the employees or visitors to enter the indoor workplace/learning space facilities. A common entrance is not allowed.

The daycare/children activities centre should be accessible to everyone, without the use of stairs. Elevators and ramps are eligible if they meet accessibility regulations and norms.

The daycare/children activities centre must be developed in a one level/floor space, preferably in ground floor spaces that have direct access to outdoor space. Level difference must be avoided. In case of stairs or level differences, appropriate handles must be provided. No sharp or hard surfaces are allowed. The geometry of the stairs has to meet all dimension and form requirements.

Safety features should be installed. Glass walls must be avoided. In case of glass walls and windows, protection bars and handles must be installed with a maximum distance of 12cm. Glass surfaces should be safe for children and public use. Window opening parts cannot be under 1,5m height

There are minimum space surface and dimensions requirements for indoor and outdoor spaces, according to the specific functionality of each space.

### **Materials used**

Flooring materials must be slip-proof, anti-bacterial, warm, easy-cleaning, sound-absorbing, with no joints, if possible.

Wall finishings should be easy-cleaning paintings or coverings. Sound-absorbing materials are suggested.

WC / DS / kitchen areas should be covered with tiles up to 1,60m of height.

Only non-toxic materials can be used.

### **Infrastructure**

Air-conditioning is obligatory as in all living spaces.

Natural lighting and ventilation is a prerequisite.

### **Esthetics**

Esthetics should be appropriate for baby and children spaces. Light, happy colours and children friendly materials are suggested.

On-site daycare centre for children up to 5 years

When designing an onsite daycare centre we should refer to two different age-groups:

Babies from 6 months to 2,5 years

Toddlers from 2,5 years to 5 years when obligatory preschool education begins

There is the option to create either a daycare centre for babies, or for toddlers or for both age groups. The choice is subject to the identified needs and goals.

The minimum requirements in terms of provided uses and surfaces depend on the age-group classification and number of children. Three different tables are presented for each case.

#### BABY DAYCARE CENTER - MINIMUM SCENARIO 10 BABIES

##### SPACES

##### NET SURFACE

##### MINIMUM DIMENSIONS

##### NOTES

##### ENTRANCE / ADMINISTRATION

entrance /waiting area

12

2,4

area where parents and children enter the centre and wait for personnel to welcome the baby -  
+ space for strolls

administration office

7

2,4

standard office

general use office

9

2,4

obligatory only for daycare center capacity > 20 babies, it can be used for doctor visit and for parents-teachers meetings

personnel area

7

2,2

when more than 6-7 personnel

isolation room

6

1,8

obligatory only for daycare center capacity > 20 babies, to isolate a baby in case of sickness

WC / DS for staff/public use

6

1 WC per 8 staff persons, 1 DS per 12 staff persons and 1 locker per staff person. If daycare center capacity > 50 kids extra WC for public use

Special space for storing strolls

3

obligatory only for daycare center capacity > 25 babies

BABY DAYCARE SPACE

MINIMUM SCENARIO 10 BABIES

Babies Sleeping area

2,5 m<sup>2</sup> per baby

3

Minimum surface 15,00m<sup>2</sup>. Multiple rooms for every 10-12 babies

Baby activities area

1,20 m<sup>2</sup> per baby

3

Minimum surface 15,00m<sup>2</sup>

Multiple rooms for every 12-14 babies

Changing area / baby bath

2,5 m<sup>2</sup> per changing station

1,5m.

1 changing station per 6 babies. Minimum surface 5,00m<sup>2</sup> (2 changing stations

Milk preparation room

4

1,5m.

Outdoor baby space

3,5m<sup>2</sup> / baby

direct access from the indoor daycare centre space

TODDLERS SPACES

MINIMUM SCENARIO 15 TODDLERS

Toddlers' activities area

1,80 m<sup>2</sup> per baby

3,6

Minimum surface 25,00m<sup>2</sup>

It can be dining area as well

Sleeping area

1,7 m<sup>2</sup> per baby

3

1 sleeping position for 4-5 toddlers. Minimum surface 9,00m<sup>2</sup>

Dining room

1,4 m<sup>2</sup> /toddler

3

Optional space Minimum surface 15,00m<sup>2</sup>

toddlers WC/bathroom

12,00m<sup>2</sup>

1 WC / 10 toddlers, 1 sink / 6 toddlers, 1 bathroom / 25 toddlers

Outdoor toddlers' space

4,5m<sup>2</sup> / toddler

## **ADDITIONAL SPACES**

kitchen

8

2,2

minimum surface when there is no food preparation

food storage

3

only when food preparation is included

washing machine

7

2,2

Cleaning facilities

3

direct exit

storage

5

## **Equipment**

A list of equipment is presented according to typology of use and space. There is basic and



additional equipment. We focus on basic equipment in the following list. Additional equipment is free to choose according to ages, locations, pedagogical approach, budget, etc.

## SPACES

### BASIC EQUIPMENT

### ADDITIONAL EQUIPMENT

entrance /waiting area

sofa or chair or pouffes

table

welcome office

coat hanger

umbrella storage

decorations

announcement board

charging station

coffee/tea machine

administration office

regular office equipment

desk and chairs

storage equipment

general use office

regular office equipment

desk and chairs

meeting table and chairs / lounge seating

personnel area

lockers for staff persons

sofa

desk or shelf

mirror  
charging station  
coat hangers  
isolation room  
pouf or sofa to relax  
first aid kit  
music  
happy and relaxing decorations  
WC / DS for staff/public use  
standard WC equipment

Special space for storing strolls  
empty space

#### BABY SPACES

Babies Sleeping area  
one baby cot for every baby  
pillows and blankets  
floor mat  
sofa or chair for supervisor  
relaxing lighting  
teddies  
Music

Babies activities area  
floor mat  
pillows  
tables and chairs  
storage boxes  
toys, tools and materials

## Books

feel free to add

Changing area / baby bath

one changing table

storage equipment

sink designed for baby bath

relax chair for the baby

Milk preparation room

table

sink

refrigerator for breast milk microwave

kettle

storage

Outdoor baby space

outdoor equipment for babies

## TODDLERS SPACES

Toddlers activities area

floor mat

pillows

tables and chairs

storage boxes

toys, tools and materials

books

feel free to add

Sleeping area

children beds

pillows

blankets

floor mat

sofa or chair for supervisor

relaxing lighting

teddies

music

Dining room

children tables and chairs

storage boxes and drawers

toddlers WC/bathroom

regular WC equipment

Outdoor toddlers' space

outdoor equipment for toddlers

### **ADDITIONAL SPACES**

kitchen

regular kitchen equipment

food storage

shelves and cupboards

refrigerator

washing machine

washing machine

tumble dryer

ironing system  
shelves and cupboards  
cleaning equipment  
waste bins  
shelves and cupboards

storage  
shelves and cupboards

#### DEMOGRAPHICS

D3, D4

#### BUILDING CAPACITY

S3

#### BUDGET

B1 H + B12 M

#### IMPACT FACTOR

PC B/ ED and/or PC T/ ED

#### **Note**

All equipment must be age-appropriate, tested and certified for children's use, health and safety regulations and norms. Since operating a daycare center is probably not in the scope of an ICT sector company or organization, daycare professionals must be contracted/hired to plan, implement and operate an onsite daycare center. The number of tutors, educators or teachers depends on the number of babies or toddlers and on national laws and regulations.

on-site after school activities / study center

SCHOOL AGE CHILDREN ACTIVITIES CENTER - MINIMUM SCENARIO 15 CHILDREN

## SPACES

### NET SURFACE

### NOTES

Activities area

30 m<sup>2</sup> or

2 m<sup>2</sup> / child

minimum 15 children

maximum 25 children

Music / theatrical activities space

45 m<sup>2</sup>

3m<sup>2</sup>/child

optional

minimum 15 children

maximum 25 children

Construction activities space

30 m<sup>2</sup> or

2 m<sup>2</sup> / child

optional

minimum 15 children

maximum 25 children

office

10 m<sup>2</sup>

storage room

4 m<sup>2</sup>

WC

4 m<sup>2</sup> / WC

2 WC / 30 children

(one for children with disabilities)

## Equipment

A list of equipment is presented according to typologie of use and space. There is basic and additional equipment. We focus on basic equipment in the list presented. Additional equipment is free to choose according to ages, locations, pedagogical approach, budget, etc.

### SPACES

#### BASIC EQUIPMENT

#### ADDITIONAL EQUIPMENT

Activities area

floor mat

pillows

tables and chairs

storage boxes

toys, tools and materials

books

study desks and chairs

feel free to add

Music / theatrical activities space

chairs

tables

feel free to add

Construction activities space

desk and chairs

storage boxes

materials

feel free to add

office

lockers for personnel

sofa

desk and chairs

first aid kit

mirror

charging station

coat hangers

storage room

shelves and cupboards

WC

standard WC equipment

DEMOGRAPHICS



D3, D4

BUILDING CAPACITY

S2, S3

BUDGET

B1 M + B12 M

IMPACT FACTOR

PC/ ED

### **other supporting structures**

Nowadays wellness factors for workplaces is a common discussion. All contemporary workplace developments focus on employee-centered approaches, having well being in the center of the design process. There are Certification Systems to ensure that buildings and companies/organisations apply sustainable and wellness policies in their spaces. In this part of the toolkit we will examine some common functions like lounge/relax areas, restaurants, sports facilities which may or may not exist in some workplaces/learning spaces but could be very useful both for parents and non-parents.

### **Relax / lounge areas**

Contemporary life for working parents demands extra effort to deal with everyday obligations. As a result many adults suffer from burnout and exhaustion due to extended lack of sleep or rest. At the same time everybody might need some relaxing time during the working day to refresh and boost productivity.

The provision of relax/lounge areas in the workplace/learning space is beneficial for all employees and students but especially for parents.

### **Definition of use**

Relax/lounge areas are used by all employees when they feel like taking a lounge break or changing to a non formal working environment

surface

very flexible, from 12m<sup>2</sup> to 50m<sup>2</sup> for lounge areas

position

preferably close to workstations/classrooms, so as to be integrated in the everyday routine and not need much time to reach

space requirements / spatial characteristics / functionality

all requirements and comfort conditions that a workspace/learning space is subject to; natural lighting and ventilation, air-conditioning, soundproofing.

infrastructure

nothing more than what an office or meeting space already has.

equipment basic

very flexible

lounge furniture, sofas and oversized chairs

equipment additional

coffee/tea machine

electrical and data outlet to plug and play for laptop to support informal meetings

internet access

soft lighting

music

yoga balls and stretching equipment

beanbags and pillows

greenery

water element

feel free to add

estimation of cost

Flexible but it can be a low-cost intervention

Cost cannot be estimated accurately because of differences between countries in terms of equipment costs and multiple choices

who do you need to design and construct

Technical staff or Facility Management or Space Management team to check infrastructure and space availability /

HR to identify the needs /

Designer or it can be a team building activity / Procurement team

Next steps

identify needs (how many lounge areas according to number of employees / at least one and/or one every 50 people)

identify possible spaces that meet the requirements

design phase / could ask help from employees to create it

construction / implementation phase

identify, buy and install equipment

spread the news

welcome people

Pros

Easy application /

Not specific requirements /

Mostly extra equipment is needed /

Low cost intervention /

Flexible space is needed

Workplace community building

Relaxing people are happier and more productive

Cons

No cons

Supporting policies

Rulebook for the use of space.

Number of spaces

Lounge areas can be distinct from other workspaces or integrated in them. They can be as many as the space management can afford according to the company's or organisation's policies.

You can offer one large communal relaxation area or smaller areas dispersed around the space. Even small private relaxation areas can be provided for self isolation and detachment (preferably sound-proof and internet-free areas). There are no specific rules for relaxing areas and no expensive office redesigns are needed.

### **Note**

There are even ready-made pods to add small relaxing rooms to any work/learning environment. To experience full detachment and relaxation, spaces without internet access are suggested.

### **Kitchen and restaurants**

Another everyday obligation which adds on stress and time cost is food preparation for oneself and their family. Different and busy time schedules do not allow much time for everyday family meal preparation. It would really help families if all members could eat either at the school or daycare center or at their workplace and if this service was offered by the establishments.

Many workplaces offer kitchen facilities and/or restaurants in their premises. On the condition that the food and snacks they offer are healthy and affordable they could really save time and effort for all the employees and be further appreciated by parents. With fair pricing and healthy oriented nutrition, employees could solve their family everyday nutrition effort by using their workplace restaurant menu even for their families.

Kitchen areas also help employees prepare, conserve and enjoy their meals. If there is no availability of space or potential to have an on-site restaurant collaborating with restaurants in the neighborhood can be a good idea.

### **Gyms / sports facilities**

Onsite gym or sport facilities for workplaces may seem like a luxury. Bigger companies are making an effort to include exercise facilities in their premises so as to make it easy for their employees to move.

Self-care and personal time, especially during the early years of parenthood often seems like a luxury. If exercise facilities were provided in the workplace it could be more feasible for parents

to find some time to exercise and care for their wellness. This would help with stress management and self esteem and would boost productivity.

Of course gym services are not in the scope of the ICT sector companies and, in order to create and operate such facilities, extra space and operational costs must be afforded.

### **how to choose / methodology**

Proposals for various scales, complexity, budget and needs are presented above. This chapter will help you make the most appropriate decisions based on the size and capacity of the company/institution, feasibility, building characteristics, budget and expected impact.

Non spatial proposals, which are mostly collaborations and outsourcing services, are very flexible but need careful research to select the appropriate service providers and estimate the number of beneficiaries. The following tables will help you understand how many people would benefit from the selected provisions and their budget scale.

#### **BENEFITS FOR PARENTS WITH CHILDREN UNDER 5 YEARS**

number of children 6 months - 5 years

annual cost / child

cost per occasion

provision of occasions per year

**TOTAL**

daycare centres

regular nannies services

backup care / nannies

co-working with childcare (regular for remote workers)

co-working with childcare (back up care)

**TOTAL**

#### **BENEFITS FOR PARENTS WITH CHILDREN OVER 5 YEARS**

number of children 6-12

annual cost / child

cost per occasion

provision of occasions per year

TOTAL

study / activity centres after school

regular childcare professionals after school services

backup care / nannies

co-working with childcare (regular for remote workers)

co-working with childcare (back up care)

TOTAL

For spatial / onsite proposals a table is presented which sums up the basic information on space and budget needs and a rough demographics codification for each category of proposals.

If you are representing a very small or small company refer to proposals for D1 or D2 accordingly.

If you have limitations on space availability refer to proposals S1 or SF.

For budget allocation see indications on the budget categories.

Big scale onsite proposals make sense only for D3 and D4 companies who can afford the space S3 and S4 and the budget BH.

The upper factors concern the feasibility of proposals.

The key decision-making factors are needs assessment and expected impact.

First step is to identify specific needs and the appropriate solutions.

When we identify needs we can estimate the impact and relative cost.

Needs assessment may prove a complicated and delicate process. Some features may be available in the HR department and for others a research with the employees participation may be needed.

In this chapter we have also included an indicative questionnaire list which should be adjusted per case study.

## **Questionnaires**

for HR/general quantitative demographic research

### **PEOPLE**

Number of FTEmployees (1a. men/1b. women)

Number of FTEmployees aged 18-50 (2a. men/2b. women)

Number of parents with children under 12y.

Number of children per parent

Number of children aged 6m.-2,5 y.

Number of children aged 2,5-5y.

Number of children aged 6-12

Number of children aged 13-17

More specifically:

2b will help on how many lactation rooms are needed taking under consideration the possibility and will of having children. This is a very sensitive GDPR issue and should be handled with care.

3 is the number of possible beneficiaries

5 and 6 is the number of children who are possible to use onsite daycare center or occasionally parent/children offices

7 and 8 is the number of children who are possible to use onsite children activity center after, study areas or occasionally parent/children offices

When the above information is established, you can proceed to further needs assessment using a focused questionnaire.

Needs assessment questionnaire for parents

For parents with children aged 6 months - 5 years

How many children do you have?

Ages of children

How do you manage childcare in the day to day routine?

parents changing shifts / one parent does not work

family members

professional childcare at home (nannies, tutors)

daycare center

combination of the upper

currently looking for a solution

Are you satisfied with your current childcare arrangements?

Yes

No

If not, what are your biggest difficulties / challenges?

location / distance

quality

time management

financial

unexpected failures

Please describe

.....



What would you change in order to meet all your expectations, preferences and optimize your family schedules?

During the last 6 months, have you been obliged to miss one or more work days due to lack of childcare?

Yes, up to three days per year for unexpected reasons

Yes, more than three days per year for unexpected reasons

Yes, up to three days per year for scheduled reasons (ex. school holidays)

Yes, more than three days per year for scheduled reasons (ex. school holidays)

No

During the last 6 months, have you been obliged to come in late or leave earlier one or more work days due to lack of childcare?

Yes, up to three times per year for unexpected reasons

Yes, more than three times per year for unexpected reasons

Yes, up to three times per year for scheduled reasons (ex. school holidays)

Yes, more than three times per year for scheduled reasons (ex. school holidays)

No

Would you care for on-site childcare in the workplace?

Yes

No

Comments

.....

Would you care for onsite childcare activities in the workplace held by professionals during official school holidays which are not bank holidays?

Yes

No

Comments

.....

Would you use a specially designed and fully equipped and safe office space where you could have your child with you on unexpected child care failures?

Yes

No

Comments

.....

Would you be interested in participating on a working group for onsite childcare solutions to facilitate parents in the workplace?

Yes

No

Please share with us any concerns or ideas on the above issues in general or in specific subjects

For parents with children aged 5 years - 12 years;

How many children do you have?

Ages of children:

How do you manage childcare after school?

parents changing shifts / one parent does not work

family members or friends

professional childcare at home (nannies, tutors)  
study/activity center / summer camp  
combination of the upper  
currently looking for a solution

How do you manage childcare on school holidays?  
parents changing shifts / one parent does not work  
use my official days-off  
family members  
professional childcare at home (nannies, tutors)  
study/activity center/ summer camp  
combination of the upper  
currently looking for a solution

Are you satisfied with your current childcare arrangements?

Yes

No

If not, what are your biggest difficulties / challenges?

location / distance

quality

time management

financial

always looking for ad-hoc solutions

unexpected failures

Please describe

.....

What would you change to meet all your expectations, preferences and optimize your family schedules?

During the last 6 months, have you been obliged to miss one or more work days due to lack of childcare?

Yes, up to three days per year for unexpected reasons

Yes, more than three days per year for unexpected reasons

Yes, up to three days per year for scheduled reasons (ex. school holidays)

Yes, more than three days per year for scheduled reasons (ex. school holidays)

No

During the last 6 months, have you been obliged to come in late or leave earlier one or more work days due to lack of childcare?

Yes, up to three times per year for unexpected reasons

Yes, more than three times per year for unexpected reasons

Yes, up to three times per year for scheduled reasons (ex. school holidays)

Yes, more than three times per year for scheduled reasons (ex. school holidays)

No

Would you care for onsite after school childcare / study center in the workplace?

Yes

No

Comments

.....

Would you care for onsite childcare activities in the workplace held by professionals during official school holidays which are not bank holidays?

Yes

No

Comments

.....

Would you use a specially designed and fully equipped and safe office space where you could have your child with you on unexpected child care failures?

Yes

No

Comments

.....

Would you use a specially designed and fully equipped and safe study space where your child could study / play / read?

Yes, on a daily basis with a professional

Yes, on a daily basis by itself and/or other children

Yes, occasionally whenever needed

No

Comments

.....

Would you be interested in participating on a working group for onsite childcare solutions to facilitate parents in the workplace?

Yes

No

Please share with us any concerns or ideas on the above issues in general or in specific subjects

.....

When all the above information is gathered and assessed, it will be easier to balance needs, solutions, requirements and impact and to select the most appropriate strategy.

For large scale implementations a pilot project is suggested. You can build a pilot application and ask the employees to test it and provide their feedback. This process would help in deciding on the number and final version of each case. It is also an opportunity to inform and include all employees on this process.

#### Laws / Policies / Regulations checklist

Like in all building projects, there are regulations to refer to, in terms of requirements, environmental and sustainability issues, building issues, fire resistance issues, comfort conditions, labour and workplace issues, health and safety issues. Before anything, professional advice is needed in order to reassure that proposed implementations are in accordance with general and specific regulations and processes.

National Building regulations, general and focused on workplace building regulations and school and daycare centres regulations

National Building fire regulations

National Workplace regulations

Company workplace regulations

Due to multiple regulations and laws complexity the HR team, Facility Management team and Architects team should collaborate.

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## **Best practices for parent-friendly work and learning spaces on a corporate, community and governmental level**

### **Belgium**

Belgium is leading the way in promoting a healthy work-life balance for its employees. With the introduction of remote working, many part time contracts and no work Wednesdays due to school closures, Belgian employers are providing their employees with more flexibility than ever before. By allowing their workers to balance their professional and personal lives, they are creating an environment that encourages productivity and well-being, while still being able to pursue their career goals. Also, Belgium has recently passed a draft law that allows employees to request a four-day work week, with the same salary and benefits as if they were working five days. This move is aimed at improving the quality of life for workers and reducing stress levels. It is also hoped that this law will foster innovation in the workplace, allowing employees to be more productive during their shorter work week.



Of course there are still matters to be considered though for example the use of the phone and response to emails after working hours which makes the separation of working hours and personal time fluid. An example of best practice is that recently civil servants working for Belgium's federal government were given the right to disconnect, allowing them to turn off work devices and ignore messages after hours without reprisals from bosses.

### **Cyprus**

The Law on Leave (Paternity, Parental, Caring, Force Majeure) and Flexible Work Arrangements for the Balance between Professional and Private Life of 2022" was proposed in August 2022 as a response to the EU Directive on work-life balance. The Directive provides, among other things, a two-month paid leave for working parents with children up to eight years old, a paid paternity allowance that already exists in Cyprus and a series of other facilities for young couples, such as the option for flexible forms of employment for a specific period of time, but also ensures the right to absence from work for reasons of force majeure or to care for another family member.

There is not much systemic push in that regard, but there are initiatives such as the 4-day work week experiment by Grant Thornton Cyprus that concern specific companies.

Moreover, the University of Cyprus has recently introduced a "nursery" to support its employees.

### **Greece**

The Greek Ministry for Employment and Social Affairs recently launched a call to subsidise the creation of baby care units within 120 medium and large enterprises.

The object of the program - which has a budget of 16 million euros, is financed by the Recovery Fund and is implemented by the General Secretariat of Demographic and Family Policy and Gender Equality - is to subsidise businesses with more than 100 employees (medium) and more than 250 employees (large), including shopping centres, to create baby care spaces within their building facilities.

More specifically, businesses are supported for the configuration of the premises and the supply of the necessary equipment as well as for the salary costs of up to two babysitters for the first two years of operation of the premises. The operation of the care facilities, after the end of the

funding, should be maintained by the beneficiaries for at least twice the duration of the funding, i.e. for four years.

Beneficiaries will receive upfront 50% of the costs for setting up the space and the remaining 50% upon the start of their operation. From then on, they will receive every year the subsidy for the salary costs of two childcare workers for the first two years of operation. The maximum eligible expenditure amounts to approximately 150,000 euros for each of the large enterprises with more than 250 employees, and to approximately 107,000 euros for each of the medium-sized enterprises, which employ between 100 and 250 employees.

The program will include two application cycles, with the first cycle starting now (with the publication of the relevant call to business) and the second cycle "opening" later in the year. It is estimated that a total of 120 businesses will join, 70 large and 50 medium, and the spaces that will be created will accommodate approximately 2,500 infants, aged from 6 months to 2.5 years. The aim is to harmonise family and professional life and to strengthen the participation of women in the labour market, through the provision of complementary baby care services and the creation of friendlier workplaces for new parents - and especially for women. Childcare spaces within businesses are a practice widespread in advanced European countries, which strengthens gender equality in the workplace and in the family and contributes to the well-being of working parents and their children.

Considering that family obligations are cited as the main reason for not participating in the labour market by 20% of "inactive" women aged 25-49, increasing the availability of childcare services could help increase women's employment. The "Neighborhood Babysitters" program, which has started operating as a pilot in 61 municipalities, has exactly the same objective and is in the phase of certifying the babysitters, so that they can then take care of babies for the families that will participate in the program.

## **Italy**

Family-friendly companies, which support work-life balance, are aware of the family responsibilities of their employees and strive to ensure this balance. In many European countries, including Italy, more and more companies are moving in this sustainable direction of balancing work and family time.

The first Family Audit certification was introduced in Italy in 2011. This is a management and human resources management tool available to public and private organisations that, on a voluntary basis, wish to certify their commitment to adopting measures to promote work-life balance for their employees. The Agenzia del Lavoro (AdL) grants subsidies to companies for the implementation of working time reorganisation projects aimed at favouring work-life balance and/or the enhancement of gender skills in the workplace.

Based on an analysis of company work-life balance policies and considering the impact by size of company beneficiary population, among Italian companies, we count as best practice:

Telecom Italia (Italy) TIM, which over the past three years (through the 'PLAN FOR TIM CITIZENS') has distinguished itself through inclusive business strategies and family and wellness services. Its plan has three main objectives

#### Work-life balance and shared parenting

On the issue of shared parenting, TIM has decided to double the number of mandatory paternity days to 20 (from the 10 stipulated in the 2021 Budget Law). Family services represent another pillar of TIM's corporate strategy for its employees. The aim is to improve the balance between work and family life. With TIM Summer, in particular, more than six thousand girls and boys each year have had the opportunity to participate in two-weeks stays choosing from more than 40 proposals in Italy and abroad, as well as various scholarships and access to national and international academies for employees' children. Other initiatives concern company crèches and reimbursements for the fees of other crèches, nurseries/babysitting services and the reimbursement of university fees and programmes to help and support children's education. In 2021, a number of innovations were introduced concerning the activation of specific paths to support study and school, academic and career guidance for employees' children. The experience of caring for parents and carers of frail or elderly family members has also been enhanced.

Luxottica has always stood out as a reference model of corporate welfare on the Italian scene with economic, health, educational and social assistance initiatives for employees and their

families. Its innovative strength lies mainly in the active participation of employees in the programme and initiatives with tailor-made interventions that take into account the territory and the people involved.

#### Work-life balance and shared parenting

Luxottica's Family Care project, launched in 2010, has provided for a personalised listening and response to employees' work-life balance needs: extension of flexible working hours, conventions and financial contributions for crèches and summer camps, and an on-demand babysitting service that allows all employees to have a babysitter at their home for emergency situations in a very short time. Company crèches are outsourced and opened in agreement with the municipality, 30% of the places are reserved for company employees and the rest become a support service for the local area. Paternity leave is extended to two compulsory weeks remunerated at 100% and the 'baby week', i.e. a week's paid leave for employees' children's nursery and kindergarten placement, has been introduced. The so-called 'family job sharing' is a measure aimed at maintaining the family unit's income capacity and encouraging the education of children, through the possibility for the employee's spouse or child to replace him/her for a limited period. The employee thus has the opportunity to take time off for training or seasonal work, or if unable to work, while allowing the unemployed spouse or child nearing the end of their studies to take their place in the company.

## **Spain**

#### The EFR Certificate

The EFR (Empresa Familiarmente Responsable = Family Responsible Company) certificate confirms that an organisation has good practices that integrate concrete and useful measures for the family- and work-life balance of their employees. The certificate, which was developed by the Spanish foundation Másfamilia, has been adopted by more than 850 organisations around the globe and been recognized by the United Nations and by the Interreg Europe program as "Good practice" for promoting work-life balance management policies within companies, considering the needs of employees and offering organisations a series of guidelines

to be more aware of the work environment they provide to their employees.

#### Flexible working hours and more spare time

The Spanish company Repsol has been numerously awarded for their family-friendly company culture. The company offers their employees to work from home and have flexible working hours based on planning and prioritisation of tasks. They also have “time banks”, which offer services that their employees would have to do in their spare time in order to give them more quality time to spend on other things. Additionally, they are committed to not send any emails or make any phone calls to their employees outside of their working hours.

### **Sweden**

Sweden is known for its strong emphasis on work-life balance, and as such, has several good practices to present that people in Sweden follow to maintain a healthy balance between their professional and personal lives. Here are a few of those best practices:

**Flexible work arrangements:** Many Swedish companies offer flexible work arrangements, such as telecommuting, part-time work, and flexible schedules, which can help employees better balance their work and personal lives.

**Generous paid time off:** Swedish employees are entitled to a minimum of five weeks of paid vacation per year, which provides them with ample time to recharge and spend with their families.

**Focus on health and wellness:** Swedish culture places a strong emphasis on health and wellness, and many employers encourage their employees to take regular breaks throughout the day to rest, stretch, or exercise.

**Support for parents:** Sweden has a well-developed system of parental leave, which provides support for parents who need time off to care for their children.

**Encouragement of hobbies and interests:** Many Swedish employers recognize the importance of their employees having interests and hobbies outside of work, and they provide opportunities for employees to pursue these interests during working hours.

Work-life separation: Swedes are known for being diligent about separating their work and personal lives, which can help prevent burnout and ensure a better balance.